Royal Victoria
Eye and Ear Hospital
Dublin - Ireland - Established 1897

Royal Victoria Eye & Ear Hospital

Infection Control Annual Report

2013

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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 carried out 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. Hand Gel consumption was up from the previous two years. Post operative surgical infection rates were very low. There was no MRSA Health Care Associated Infections (HCAI). See Table 2 in section 3.1 for RVEEH's KPI's. The excellent results were attributed to:

- Continual monitoring of services, consulting with patients and staff.
- Good working relationships across clinical services and between directorates.
- Service amendments and improvements based on feedback, internal and external audits, regulations, National & International standards and guidelines.

Identified risks were 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 - Identified Registered Risks

Risk	Risk to Whom	Risk Rating	Risk Category
1 Inadequate air changes due to no conventional ventilation in theatres	Patient	15	High
2 Some clinical hand wash sinks in hospital are not compliant with recommended HTM64 standard	Patient / Staff	8	Moderate
3 Non-compliance with Infection Control standards 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 Infection Prevention Control Team (IPCT) annual programme to prevent and control HCAIs;
- Specific targets relating to the prevention and control of HCAIs;
- Key Performance Indicators (KPI), including the HSE Infection Control indicators;
- The resources made available to prevent and control HCAIs
- Recent independent audits including HIQA audit in August 2013.

The Infection Prevention and Control Team (IPCT) are comprised of a Consultant Microbiologist (10 hours per week) and two Infection Control Managers 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 IPCT programme (Appendix 2) 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, the Hygiene & Decontamination Committee, the Facilities Committee and the Medical Board and Clinical Nurse Managers Committee.

The Infection Control Committee is chaired by Mr D Dunne, Chief Executive. See Appendix 8 for membership and attendance in 2013. It is a multidisciplinary committee which is responsible for the development and review of the service to prevent and control HCAIs, see Appendix 9 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 Table 2 - RVEEH key performance indicators (KPI's)

HCAI Key Performance Indicators	Targets	2009	2010	2011	2012	2013
Post-operative endophthalmitis (elective cataract surgery)	≤0.1%	0%	0.06%	0.05%	**0.08%**	**0.10%**
Endophthalmitis post intravitreal injections	≤0.05%	0.07%	0%	0.03%	**0.02%**	**0%**
Keratitis post corneal collagen cross linking		Surgery not done	Surgery not done	0%	**3.38%**	**0%**
Other Eye Infections		0.03%	0%	0%	**0.01%**	**0%**
Post op ENT Infections		0.06%	0%	0%	**0.05%**	**0%**
Number of RVEEH acquired MRSA colonization	**≤4**	1	1	1	**0**	**0**
Number of RVEEH acquired MRSA infection	**≤2**	0	0	0	**1**	**0**
Number of MRSA blood stream infections	**≤1**	1	0	1	**0**	**0**
Device related infections (Peripheral IV catheter infection)	**≤5**		2	2	**3**	**1 (aprox 0.014%)**
Clostridium difficile Infections	**≤2**	0	1	0	**0**	**0**

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%.

The RVEEH had no MRSA HCAI and were below and within all targets.

Surveillance in the RVEEH includes the following:

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

Table 3 - RVEEH & HSE KPIs target for 2013

RVEEH 2013 KPIs	HSE 2013 KPIs	Expected HSE 2014 KPIs
MRSA Blood Stream Infection 0%	0.067%	0.057%
New cases of healthcare associated Clostridium difficile diarrhoea: 0 per 10,000 bed days used	≤ 3	≤ 2.5
Median Antibiotic consumption for first half 2013 was **52.8 (Q1 & Q2)**	≤ 83	≤ 83
Alcohol gel consumption for 2013 was **53** (litres per 1,000 bed days used)	23 (L BDU)	25 (L BDU)
HSE hand hygiene audit **90%** in May and **83%** in Nov audit.	≥90%	≥90%

Alcohol gel rub usage in the RVEEH was well above the national amount for H1 of 2013.

See Appendix 5 KPI Table for more detail

3.2 MRSA

MRSA screening is requested prior to admission on all patients in the at-risk category. The profile for 2013 was as follows:

Table 4: MRSA Profile for 2013

Number of MRSA screening swabs tested from 632 patients	*2,501*
Number of positive results	*53*
Number of MRSA HCAI	0
Number of known carriers	19
Number where MRSA was hospital acquired	0
MRSA decolonisation carried out prior to surgery	36

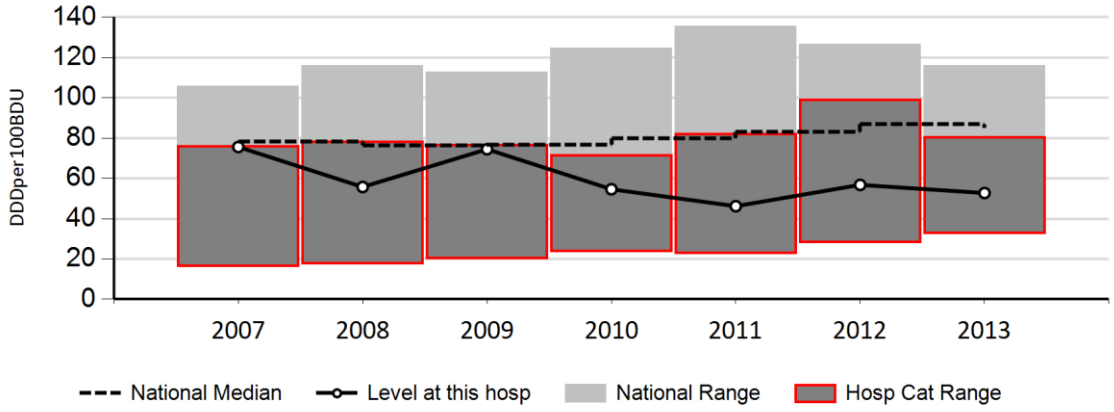
The IPCT liaise wirh patients and their GPs when MRSA eradication is being carried out. Where eradication of MRSA (post treatment) was not successful patients proceeded with surgery following a 24 hour anti MRSA treatment regime. ***There was no MRSA HCAI in the RVEEH in 2013.**

3.3 Antimicrobial Consumption

Hospital data is reported to the HPSC by the Pharmacy Department. This data is discussed at the Hospital's Drugs & Therapeutics Committee.

- Antibiotic consumption was well below National consumption for Q1 & Q2 of 2013 at 52.8 versus the National Average of 85.

Rate of RVEEH hospital antibiotic use



See Appendix 3 & 4 for National and RVEEH Antimicrobial Data

3.4 European Antimicrobial Resistance Surveillance Network (EARS-Net)

The Surveillance Scientist contributes RVEEH blood stream infection data to the European Antimicrobial Resistance Surveillance Network (EARS-Net). There were no blood stream infections in 2013 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: No. of Common Transmissible Organisms in RVEEH 2010 – 2013

	2013	2012	2011	2010
Acanthamoeba	4	8	2	3
Adenovirus	111	61	87	--
Campylobacter	0	0	0	0
Chlamydia trachomatis	11	9	7	8
Clostridium difficile	0	0	0	1
Gonorrhoeae	8^	2	4	1
Group A Streptococcus	10	13	8	8
Hepatitis B	0	0	0	0
Hepatitis C	0	0	0	1
MRSA (BSI)	0	0	1	0
MRSA (healthcare acquired colonisation)	0	0	0	2
MRSA (HCAI acquired infection	0	1	0	0
Mumps	0	0	0	1
Norovirus	0	0	0	1
Syphilis	4	4	0	1
Toxoplasmosis	0	0	1	0
TB Pulmonary	0	0	0	0
TB Extra-pulmonary	0	1	0	0
VRE	0	0	0	0

BSI= Blood Stream Infection ; HCAI= healthcare associated infection ; VRE= Vancomycin Resistant Enterococci

^Significant increase in Gonorrhoea was highlighted to Public Health Specialist by the Consultant Microbiologist.

3.6 Surgical Site Infection / Patient Device Infection

Table 6: Total Surgeries indicating number of infections

Eye Surgey	2011			2012			2013		
	Total	Infected Patients	%		Infected Patients	%	Total	Infected Patients	%
Cataract Surgery	2,012	1	0.05 %	*2,522 (Amended) 2013)	2	0.08%	2,860	3	0.10%
Other Eye Surgery	2,665	0	0%	2,645	*3	0.11 %	2,726	0	0%
Total eye surgeries	**4,677**	**1**	0.05 %	**5167**	**5 amended 2013**	**0.1%**	**5,586**	**3**	**0.05%**
Total Intravitreal Injections	2,714	1	0.03 %	3,500	1	0.02%	3,988	0	0%
ENT Surgery									
	Total	Infected Patients	%		Infected Patients	%	Total	Infected Patients	%
Parotidectomy	17	0	0%	23	0	0%	17	0	0%
Neck Dissection + laser	8	0	0%	6	0	0%	3	0	0%
Laryngectomy	0	0	0%	3	0	0%	0	0	0%
Mastoid Exploration	61	0	0%	40	0	0%	48	0	0%
Septoplasty	20	0	0%	37	1	2.7%	27	0	0%
Fess -/+ septoplasty							83	0	0%
Tympanoplasty	50	0	0%	32	0	0%	32	0	0%
Submandibular gland excision	10	0	0%	7	0	0%	15	0	0%
Tonsilectomy	---	----	----	----	----	----	216	0	0%
Other ENT Surgery	1,618	0	0%		0	0%	1,299	0	0%

2012: ***Eye Surgery:** Two patients had post op keratitis following corneal collagen cross linking and one patient developed infection post evisceration.

2013: ENT Surgery

Eleven patients returned and were admitted for treatment of haemorrhage post tonsillectomy (5%). All received prophylactic antibiotics. One patient required surgical intervention for secondary haemorrhage post tonsilectomy.

Three tracheostomy patients (n=6) developed a lower respiratory tract infection (RTI) and received appropriate treatment. All were known to have significant risk factors for developing RTI.

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

4.1 Hygiene and Infection Control 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. The IPCT carried out two Infection Contro audits in March and August 2013. All completed audits are available on the shared intranet for all staff to access. See Appendix 7 for a summary of the IPCT audits. The following are audited:

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

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

90% of RVEEH staff received Hand Hygiene education and training in 2013.

Observational hand hygiene audits were carried out in May, August and November in 2013 using the tool newly developed by the Health Protection Surveillance Centre (HPSC). The results are fed back to the HSE-HPSC and published nationally. For 2013 the HSE set a target of ≥90% compliance. When the result falls below this a re-audit was carried out following evaluation of hand hygiene facilities and hand hygiene education. The RVEEH achieved a score of 91% in May and 83% in November. Three departments had a compliance of below 90%. The average compliance rate among the Nursing staff was 91% and the average for the medical staff was 77%. Educational sessions were carried out in December targeting the medical staff and three areas were re-audited. See appendix 1 for "IPCT Hand Hygiene Action Plan post Nov 2013 audit".

Two hand hygiene awareness days were held by the IPCT was held in May and Oct. 2013.

- An ultraviolet light cabinet was used to demonstrate hand hygiene technique to staff of all disciplines;
- Approximately sixty staff took part. On site education regarding the WHO 5 moments for Hand Hygiene was given to all who participated.

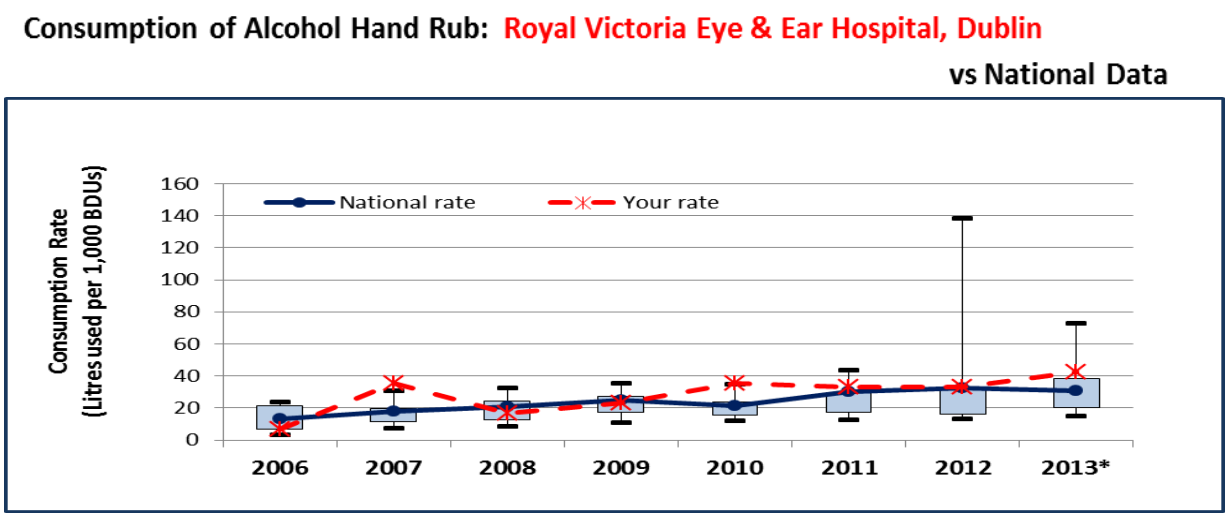
Hand Hygiene Complaints

- No complaints were received from patients or visitors regarding hand hygiene compliance in the RVEEH.

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 had a decile score of 2.

256 Litres of alcohol gel was used by RVEEH in 2013. This is an increase of 63 litres since 2012.The hospital's alcohol gel consumption compares favourably with other hospitals and specialist hospitals in the network.



See appendix 6 for National/RVEEH data

4.4 External Audits

The Health Information Quality Assurance (HIQA) made an unannounced visit to the RVEEH in August 2013. They focused on two of the health care associated infection (HCAI) National Standards. Standard 3 Environment and Facilities Management and Standard 6 Hand Hygiene Compliance. They assessed the A&E Department and the In Patient areas. There was evidence of good practice and also non-compliance practice observed in both areas. See Appendix 12 for Summary of findings.

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.

The IPCT received a positive Legionella result in September 2013 from Eye Theatre set up room. Additional flushing controls were put in place immediately and a review of the water system including temperature checks was conducted. Retesting was carried out in November which returned a very low legionella count and results from a December sample returned negative for legionella. Flushing in this area continues as the particular outlet is infrequently used.

Legionella Risk Assessment

An Independent Legionella risk assessment was carried out in August 2013 with the following recommendations:

- Ensure all tanks are correctly sealed
- It was recommended that water mapping should be carried out.
- Check that all tanks have outlets remote from intake points.
- Training an awareness records for key personnel
- Desludging of boilers and calorifiers.
- Review drinking water fountain management.

A second independent assessment of the Hosptals water system and water management took place in November, following the positive Legionella result and a full report was received in December. The IPCT and the CEO are to meet in January 2014 with the current environmental contract company to review the Hospitals water management and update and revise the water and Legionella programme.

Present Controls in place:

- Quarterly external & regular internal water temperature monitoring is carried in the hospital.
- All water tanks are cleaned 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) & total viable counts is carried out.
- Monthly chlorination in place up to November; stopped following advice from independent expert.
- Environmental monitoring is an agenda item for the quarterly infection control committee meeting.

5.2 Upgrading work

Upgrade works were carried out in many areas of the hospital in 2013 as follows:

- Painting works were carried out in the Westwing, wards 4 & 5 and touch up painting was done in many of the hospitals departments.
- Ward 2 on the Ground floor was totally refurbished to accommodate a new “Endoscope Decontamination Unit” The manual washing of nasendoscopes has now ceased.
- Works began in wards 4 & 5 to accommodate a transfer of ENT OPD from its current location which has no wheel chair access.
- The old check in area in Eye OPD was refurbished into a vision testing room.
- New HTM64 compliant sinks were put into wards 27, A&E treatment room and into the orthoptic clinic room.

6.0 Policies, Procedures and Guidelines updated in 2013

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 reviewed and updated in 2013

1	Tuberculosis Management	
2	Norovirus	
3	TSE	
4	MDRO Policy	
5	Audit Policy	
6	Aspergillus Policy	
7	Diabetic Monitoring	Updated by the Infection Control Team
8	Emergency management of Injuries	
9	Scabies	
10	IPCT programme and workm plan	
11	Management of multi dose vials	
12	Intravascular catheter management	
13	Management of Linen	
14	Surgical site Infection Policy	
15	Antimicrobial guidelines	SK & D&T committee

A sepsis guideline was drafted and approved by the Consultant Microbiologist, the Medical Director and the Infection Prevention and Control Committee in December 2013. The guideline has been referred to the Consultant Anaesthetist and the Drugs, Therapeutics and Antimicrobial Stewardship Committee for approval in January 2014.

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. This risk is currently on the hospitals risk register. The IPCT carry out air sampling in all the theatres and the Central Decontamination Unit every 3 months. See Appendix 11.

7.2 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.

7.3 Hand Hygiene Facilities

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 to upgrade the hospitals sinks. The IPCT recommends the use of alcohol hand gel in areas where there are inadequate or insufficient hand washing sinks. The HPSC strongly recommend the use of hand alcohol gel as a means of hand decontamination.

Appendix 1 - IPCT Hand Hygiene Audit November 2013 Action Plan areas of Non – Compliance

	Issue	Recommendation	Action required	Action by	Progress/ Evaluate
1.0	**Hand hygiene compliance following audit of 210 opportunities** **83% compliance**	Aim to reach ≥ 90% compliance in all grades of staff by next audit in May 2014	Education Programme: • ICT to review and evaluate education programme for 2014 • Ensure all clinical staff has allocated time for Hand Hygiene training. • HSE land on-line education and training in hand hygiene to be included in education programme. • Ward Sessions to form part of education programme for 2014	IPCT	Assess at ICC Meeting March 2014
2.0	**Hand Hygiene Infrastructure not compliant**	Sink upgrade project to be revisited in new year. As per HPSC advice, Alcohol hand rubs to be encouraged for hand hygiene	• Identify priority clinical areas for new sink when funding becomes available. • Review alcohol hand gel dispensers in all areas. • Order additional dispensers where required • Ensure that dispensers are functioning and nozzles are not blocked • Make individual (50ml) size gels available to all staff	IPCT Area Manager Healthcare Assistants IPCT	HTM 64 Compliant Hand Hygiene Sinks Project is On Going
3.0	**Medical Staff compliance low**	Prioritise Medical staff for Hand Hygiene education	• Education at induction for all NCHDs • All consultants to receive education at least once every two years.	IPCT	Medical Staff have been targeted – On Going
4.0	**Raise profile of Hand Hygiene in organisation**	All staff must be aware of importance of hand hygiene as means of preventing spread of HCAI	• Results of audits to be displayed in all clinical areas • Hand Hygiene posters and signs to be displayed in all clinical areas • Hand Hygiene information leaflets to be available in all areas • Ensure staff receive feedback from audits and highlight areas of good practice • Hand Hygiene audit results to be discussed at ICC meeting and reported to management through CE report and Annual report	IPCT	Hand Hygiene Awareness Programme is On Going

Appendix 2 - Infection Prevention & Control (IPC) Plan for 2013

Target	Action	Action by	*Completed*
To provide infection prevention and control <u>Education for staff and students</u> in the Hospital	• Participate in IV Study Days • Mandatory Infection Control lecture- all Staff • Hand Hygiene lectures • Induction for all new nursing and medical staff • Provide advice and updates on matters relating to IPC.	Infection Control Team	All actioned in 2013
Develop and review infection control <u>policies, procedures and guidelines</u> in accordance with legislation, national guidelines, evidence-based practice and best practice.	<u>Policies/ Guidelines updated in 2013</u> • Norovirus • TSE • MDRO Policy • Audit Policy • Aspergillus Policy • Diabetic Monitoring • MRSA • Emergency management of Injuries • Scabies • IPCT programme and workm plan • Management of multi dose vials • Intravascular catheter management • Management of Linen • Surgical site Infection Policy • Tuberculosis Management	Infection Control Team Consultant Microbiologist and D&T committee	All actioned in 2013
Infection <u>Control Audits</u> of practice and facilities	• On-going programme of audits in place (See audit schedule for '13) • HST audits of facilities • 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	Infection Control Team & Pharmacy	All actioned in 2013

Appendix 2 - Infection Prevention & Control (IPC) Plan for 2013

Target	Action	Action by	*Completed*
<u>Monitor and report</u> rates of infection, healthcare associated infections, notifiable diseases antimicrobial resistance, antimicrobial consumption and alcohol gel usage.	The following are some of the aspects conducted in 2013 • Daily ward based and laboratory surveillance • Collect analyses and report post-operative endophthalmitis infection rates. • Collect, analyses and report data on infections and antibiotic resistant organisms • Collect and report data on statutory notifiable diseases • Collect and report data to the European Antimicrobial Resistance Surveillance Network (EARS-Net) • Collect and report data on alcohol gel use. • Collect and report data on antibiotic consumption. • Distribute quarterly surveillance reports to Infection Control Committee • Distribute quarterly or as required surveillance reports to all relevant clinical staff.	SF, MMcC, SK SF, MMcC, SK SF, MMcC, SK, SK Pharmacy, SF, MMcC Pharmacy SF, MMcC SF, MMcC, SK	All actioned in 2013
Investigate and lead on <u>outbreak management</u>	Monitor, investigate and control outbreaks in a timely manner. Provide information to staff and patients as required.	Infection Control Team & Consultant Microbiologist others as required	All actioned in 2013
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.	Infection Control Team & Consultant Microbiologist	All actioned in 2013

Appendix 2 - Infection Prevention & Control (IPC) Plan for 2013

Target	Action	Action by	*Completed*
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	Infection Control Team & Consultant Microbiologist	On going
Attend regular meetings and educational seminars relevant to infection prevention and control	• Infection Control Committee • Infection Control Team meetings • Hygiene Committee • Sterivigilance Committee • Integrated Risk, Quality & Safety • Antimicrobial stewardship /Drugs & Therapeutics Committee • Environmental monitoring committee (IPCC) • IPS Conference • HPSC Study Day • Other relevant conferences	Infection Control Team & Consultant Microbiologist	On going
Produce an annual work plan and annual report	• IPC Work Plan 2013 • IPC annual report 2013	Infection Control Team & Consultant Microbiologist	Completed

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

Signed_____ **Date**_____

Appendix 3 - Median antibiotic consumption rate in DDD per 100 BDU.

The table is for public acute hospitals by hospital category and the no. of hospitals, from 2009 to the first half of 2013

	2009		2010		2011		2012		2013 First Half	
Hospital Category	**Rate**	**No**	**Rate**	**No**	**Rate**	**No**	**Rate**	**No**	**Rate**	**No**
General	79.6	26	83.2	25	92.0	24	92.2	23	91.3	24
Regional/Tertiary	78.0	9	81.2	9	82.9	9	84.4	9	84.4	9
Specialist	35.9	9	33.9	9	29.0	9	56.8	9	46.2	9
All Hospitals	**76.6**	**44**	**80.0**	**43**	**83.1**	**42**	**87.0**	**41**	**85.1**	**42**
***RVEEH Median Antibiotic consumption for the RVEEH for Q1 & Q2 2013									**52.8**	

National data for all Hospitals

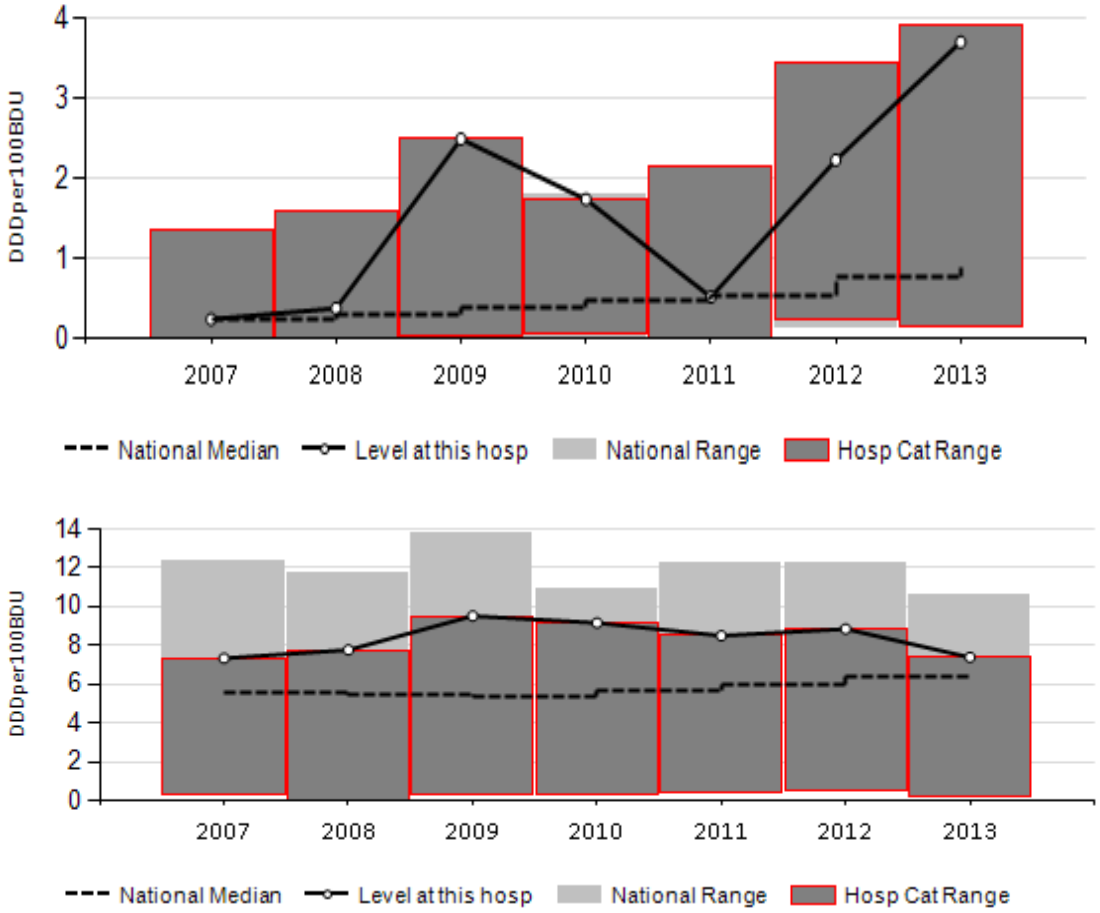
RVEEH Median Antibiotic consumption for first half 2013 is below national consumption rate.

Appendix 4 - National & RVEEH Antimicrobial Statistics

Measure	Year	Level	% Change	Nat Median	Decile
DrugType:Antibiotic	2013	52.76	-7%	85.07	2
AlertAgents:A_AntiGPosAgents	2013	0.84	-14%	2.53	2
AlertAgents:B_Gen2Cephs	2013	0.82	-66%	2.64	2
AlertAgents:C_Gen3Cephs	2013	1.83	37%	1.53	7
AlertAgents:D_fQs	2013	6.81	-31%	5.33	7
AlertAgents:E_BroadSpecPens	2013	13.59	4%	28.31	2
AlertAgents:F_Carbapens	2013	0.00	0%	1.89	1
AlertAgents:G_Clinda	2013	3.70	66%	0.88	10
A_Alerts:1_O_Lin	2013	0.00	-100%	0.19	1
A_Alerts:2_P_Lin	2013	0.00	0%	0.12	1
A_Alerts:3_O_Van	2013	0.00	0%	0.00	1
A_Alerts:4_P_Van	2013	1.57	64%	1.33	6
A_Alerts:5_P_Tei	2013	0.08	17%	0.32	3
A_Alerts:6_P_Dap	2013	0.00	0%	0.02	1
E_Alerts:1_O_CoAmox	2013	5.80	59%	14.75	1
E_Alerts:2_P_CoAmox	2013	7.38	-17%	6.35	7
E_Alerts:3_P_Tazo	2013	0.41	-48%	4.57	1
IVProp:SwitchIV	2013	21.00	70%	6.23	10
IVProp:AllIV	2013	63.25	25%	48.10	9
DrugType:Antifungal	2013	2.22	65%	1.12	8

Appendix 5 National & RVEEH Clyndamycin Consumption & IV Co-amoxiclavic

RVEEH had very high consumption of Clyndamycin with a decile score of 10. To get the decile score, the total number of hospitals are sorted by their quarterly rate and then divided into 10 groupings.

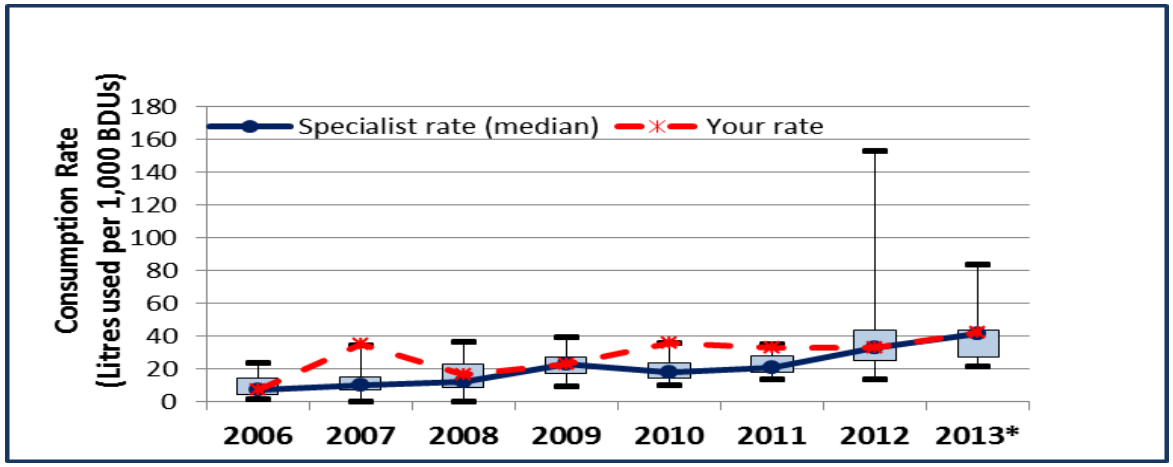


Rate of hospital IV co-amoxiclavic use in the RVEEH is higher than the national range

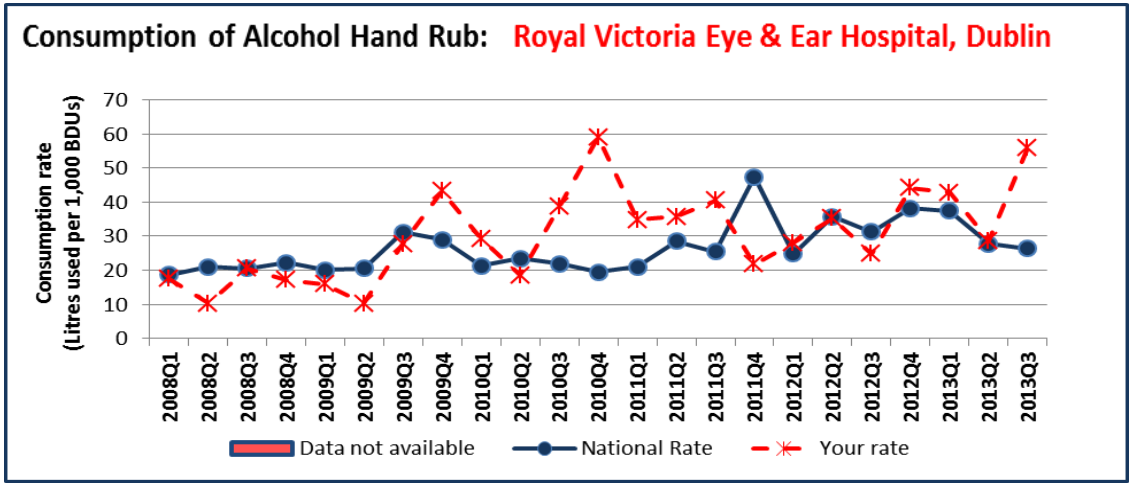
Appendix 6 – HSE Rates of MRSA, Hand Hygiene Compliance plus Alcohol Hand Rub & Antibiotic Consumption Rates.

	Hospital	Bed Days Used	Bed Days Used	Rate of MRSA bloodstream infections per 1,000 bed days used					% Hand Hygiene Compliance		Alcohol hand rub consumption (L per 1000 BDU)*			Antibiotic Consumption Rate (DDD per 100 beds per hospital			
	Standard 2012			<0.067					85%		≥23			<83			
	Standard 2013			<0.060					90%		≥25			<83.7			
	Data up to:	2012	2013 Q1+Q2	2010	2011	2012	2013 Q1	2013 Q2	2012 P4	2013 P5	2012 Q3	2012 Q4	2013 Q1+Q2	2010	2011	2012	2013 Q1+Q2
General	MRH at Tullamore	55,243	28,552	.120	.086	.091	0	.069	81.9	71.9	71.0	66.6	79.8	80.6	103	111.6	103.2
	MRH at Mullingar	65,921	33,916	.066	.108	.030	0	.117	87.6	76.7	43.8	55.6	52.2	83.2	86.5	ND	ND
	MRH at Portlaoise	43,107	22,505	.069	.043	0	0	.175	81.4	87.1	41.2	58.9	41.2	ND	ND	100.2	94.3
	Naas Gen Hospital	65,880	35,496	.109	.014	.091	0.111	0	90.5	92.4	ND	37.9	18.5	90.1	97.1	96.0	83.6
	Loughlinstown	38,152	18,501	0	.026	0	0	0	85.2	86.2	24.0	35.6	26.5	81.5	93.1	85.3	98.9
Tertiary	AMNCH Tallaght	173,929	88,963	.064	.038	.040	.069	.022	82.9	80.0	43.1	26.5	23.6	95.2	91.8	88.6	95.7
	St. Vincent's	154,925	85,323	.079	.135	.065	.144	.092	87.1	91.0	ND	23.2	21.0	124.9	135.4	126.7	110.8
	St. James's Hospital	294,854	149,546	.077	.058	.017	.040	.027	84.3	83.3	20.2	22.6	24.5	80.0	81.3	81.4	84.4
Specialist	Coombe Hospital	39,690	23,208	0	.018	0	0	ND	84.3	89.8	21.4	24.3	31.0	29.9	28.9	33.7	39.2
	NMH, Holles St.	44,709	24,804	0	0	0	0	0.00	85.7	94.3	14.5	15.6	62.9	23.6	22.7	28.8	36.7
	CUH Temple St.	19,475		0	0	.074	0	0.00	73.3	77.6	38.8	40.5	ND	68.8	82.4	99.4	73.4
	OLCH Crumlin	44,740	28,847	.067	.066	.017	.068	0.00	92.8	93.3	35.6	37.1	40.4	72.0	74.5	70.3	80.9
	St. Lukes Rathgar	28,411	17,676	.023	0	0.00	0	.119	84.8	91.9	11.3	ND	17.5	26.8	25.7	30.7	32.4
	St. Michael's (DunL	16,278	11,322	.123	.043	.047	0	0.00	85.1	89.0	ND	ND	23.4	97.2	93.3	96.6	104.4
	RVEEH	**4,476**	**2688**	**0**	**.153**	**0**	**0**	**0.00**	**86.1**	**91.0**	**24.8**	**44.2**	**35.4**	**55.6**	**46.0**	**56.8**	**52.8**
														Our Antibotic Consumption rate is 4th lowest of the 15 Hospitals listed, in 2013.			

Appendix 7 RVEEH Alcohol Gel Consumption - June 2013



RVEEH alcohol gel consumption rate compared with other specialist hospitals



RVEEH verus National Data by Quarter favours well compared to National rate especially for 2013.

Appendix 7 - Alcohol Hand Rub Consumption in the RVEEH

	2010	2011	2012	2013
No. of participating hospitals	**43**		**43**	**43**
Bed Days used (BDU's)	**6,466**	**6,582**	**5,869**	**Data not available**
Total vol hand rub used	**230**	**218**	**193**	**256**
RVEEH consumption rate	**35.6**	**33**	**32.8**	**42 (Q1 & Q2 &Q3)**
National consumption rate vol/1000BDU's	**21.7**	**30.2**	**28.2**	**Data not available yet**
Decile score	**1**	**3**	**3**	**2**

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 2013 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.

Appendix 8 - Membership of Infection Control Committee

Committee Members	**No of Meetings Attended in 2012** (4 Meetings Held)
Chief Executive Officer - Danny Dunne (Chair)	3
Consultant Microbiologist - Dr Susan Knowles	4
Assistant DON - Elspeth Finlay	3
Assistant DON - Mary Casey	1
Infection Control Manager - Sinead Fitzgerald	4
Infection Control Manager - Margie McCarthy	4
Risk Manager - Sarah McCarthy	4
Theatre Manager - Mary Doherty	2
Pharmacist -Jane Anne O' Connor	2
CDU Manager - Carol Gaskin	0
Catering Supervisor - Ann Gillick	1
Quality Officer - Aoife Duggan	1
ENT NCHD - Dr Lulianna Moariu	2
EYE OPD CNM11 - Ann Marie Flynn	1

Appendix 9 - Terms of Reference - Infection Control Committee

Creation Date: March 2013 **Chairperson:** Mr Danny Dunne CEO

Committee Members:

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

Committee Reports To: Integrated Risk Quality & Safety Committee

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

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

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 10 – Infection Control Audit Summary - March 2013

C	Mar-13								
	DCU	In-patient	HLW	ENT OPD	A&E	E&E OPD	R Room	OT	CU
Waste Handling and Disposal Audit	90%	97%	96%	91%	95%	90%	98%	89%	89%
Linen Audit	73%	82%	82%	n/a	n/a	n/a	77%	80%	72%
Handling and Disposal of Sharps Audit	94%	96%	96%	96%	92%	96%	100%	96%	96%
Hand Hygiene facilities	91%	80%	95%	85%	86%	79%	90%	100%	85%
Use of Personal Protective Equipment Audit	90%	94%	94%	91%	96%	90%	93%	100%	91%
Care of Peripheral Intravenous Lines Audit	100%	92%	100%	96%	100%	100%	100%	100%	92%
Care of Patient Equipment	90.5%	98.0%	98.0%	96.0%	84.0%	95.0%	95.0%	100.0%	92.0%

- New linen cabinets were purchased for DCU & OT.
- A linen shuttle cabinet was purchased for the west wing

Appendix 10 - Infection Control Audit Summary – August 2013

	Jul-13								
Infection Control Audits July 2013	DCU	WW	HLW	ENT OPD	A&E	EYE OPD	PACU	CU	OT
Waste Handling and Disposal Audit	91%	95%	93%	91%	96%	91%	96%	90%	89%
Linen Audit	82%	86%	86%	n/a	n/a	n/a	73%	72%	80%
Handling and Disposal of Sharps Audit	91%	90%	98%	91%	90%	96%	96%	96%	100%
Hand Hygiene facilities	83%	87%	88%	77%	77%	80%	91%	88%	91%
Use of Personal Protective Equipment Audit	97%	97%	100%	97%	97%	100%	100%	93%	100%
Care of Peripheral Intravenous Lines Audit	100%	100%	100%	100%	100%	100%	100%	100%	100%
Care of Patient Equipment	93.0%	100.0%	98.0%	94.0%	96.0%	96.0%	97.0%	100.0%	97.0%

- Cardboard waste was not being disposed of correctly in a lot of departments. New cardboard bins and and new paper waste bins were purchased .
- New HTM 64 compliant sinks were put into A&E, ward 27 & the orthoptic department.

Appendix 11 - Operating Theatre & CDU Bacterial Counts:

The 2013 Bacterial Audit Counts

Acceptable Level: ≤25 CFU per 90mm agar plate per hour

Theatre	April 2013			July 2013			October 2013		
	CFU			CFU			CFU		
	Trolley	Ledge		Trolley	Ledge		Trolley	Ledge	
ENT 1	15	13		34	16		17	11	
ENT 2	28	16		10	9		23	30	
EYE 1	5	18		15	15		9	4	
EYE 2	5	5		23	18		11	5	
EYE 3	13	13		16	14		8	16	

Colony Forming Units (CFU)

Bacterial counts are taken in the Central Decontamination Unit (CDU) every four months. These include settle plates (bacterial and fungal) and surface contact plates. All were within acceptable ranges. (copies of these results are hels by the CDU manager and the IPCT).

Appendix 12 - HIQA Inspection Aug 2013 - Summary of findings

The Health Information Quality Assurance (HIQA) made an unannounced visit to the RVEEH in August 2013. They focused on Standard 3 Environment and Facilities Management and Standard 6 Hand Hygiene Compliance. They assessed the A&E Department and the In Patient areas. There was evidence of good practice and also non-compliance practice observed in both areas. A summary of the key findings were as follows:

Good Practice Findings:

- Patient equipment was found to be clean and appropriate for use.

- Waste was observed to be generally very well managed
- Cleaning equipment used by cleaning staff were observed to be well managed with colour coded systems demonstrated
- Bed rails, matters, pillows were all observed to be clean and dust free
- Hand Hygiene facilities were observed to be accessible for all users

Non Compliance Findings:

- The reprocessing of Fibroscopes were observed not to be in line with best practice (scopes were observed to be manually washed and decontaminated). A dedicated Endoscope decontamination Unit was in the process of being completed when HIQA inspected the RVEEH. This Unit opened in October 2013.
- A light moderated level of dust was found on bed light surfaces and on the under carriage of some beds
- Chipped paint was observed on doors and radiators in both areas assessed.
- Seventeen hand hygiene episodes were observed in A&E and In Patient areas but only eleven were taken, which was 65% compliance for Hand Hygiene.

A Quality Improvement Plan was developed. Improvements are on-going to comply with National Standards. See RVEEH Web Site for this Quality Improvement Plan.