

# INFECTION PREVENTION & CONTROL

## ANNUAL REPORT

2010-11

Northern Devon Healthcare Trust



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Abbreviations:

- AWG Antibiotic Working Group
- CAUTI Catheter associated urinary tract infection
- CDI *Clostridium difficile* Infection
- DIPC Director of Infection Prevention & Control
- GRE Glycopeptide resistant enterococcus  
A form of the organism, enterococcus, which is resistant to the glycopeptide antibiotics, vancomycin & teicoplanin
- HCAI Healthcare associated infection
- HCW Healthcare worker
- IPCN Infection Prevention & Control Nurse
- IPCC Infection Prevention & Control Committee
- IPCT Infection Prevention & Control Team
- MRSA Meticillin resistant *Staphylococcus aureus*  
A form of the common organism *Staphylococcus aureus* which is resistant to penicillins and related antibiotics, but can usually be treated by a range of antibiotics, both tablets and injection
- MSSA Meticillin sensitive *Staphylococcus aureus*  
The usual form of the common organism *Staphylococcus aureus* which is sensitive to penicillins and related antibiotics
- NDHT Northern Devon Healthcare NHS Trust
- PEAT Patient Environment Action Team
- PSIPCC Patient Safety and Infection Prevention & Control Committee
- WTE Whole Time Equivalent

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## **1 Executive summary:**

Infection Prevention & Control has been a high priority throughout the year for NDHT. Key points for NDHT in 2010-11 were:

- A further reduction in the rates of *Clostridium difficile*. The total number of *Clostridium difficile* cases in North Devon fell from 60 to 41 in 2010-11, a 32% reduction. 9 of these cases were detected by a new, more sensitive test. If these are excluded the underlying reduction is 47%. Those cases attributed to NDHT increased from 23 to 27 in 2010-11. However there were 8 cases detected by the new, more sensitive test. If these are excluded there is an underlying decrease of 17%.
- There was an increase in the number of MRSA bacteraemia. The total MRSA bacteraemia numbers have rose from 4 to 6 in 2010-11. 3 of these bacteraemia were acquired in the Trust.
- The Trust has remained within its limit for numbers of *Clostridium difficile* cases set by the Department of Health and the Strategic Health Authority. However it has exceeded the limit of just 1 MRSA bacteraemia for 2010-11.
- Hand hygiene compliance across the Trust has remained consistently high. Audit shows that overall compliance has been over 95%. The Trust is continually working towards achieving 100% compliance.
- The Care Quality Commission found no problems during an unannounced inspection when NDDH's performance against the Code of Practice for the NHS on the Prevention and Control of Healthcare Associated Infections, known as the 'Hygiene Code' was assessed. The inspection found:

*"North Devon District Hospital was very clean and well maintained. Equipment was of a high standard and promoted infection control. Staff used appropriate precautions to minimise infection risk and ensure that people understood these whether they were a patient or a visitor. Overall, we found that North Devon District Hospital was meeting this essential standard."*

## **2 Introduction**

In 2010-11 the Infection Prevention & Control Team (IPCT) provided a service to Northern Devon Healthcare Trust (acute and community services). In addition a service was provided via a SLA to Devon Partnership Trust (DPT). The IPCT worked closely with Devon PCT, the Health Protection Agency (HPA), and Stratton Hospital in Cornwall.

From April 2011 NDHT will have responsibility for community hospitals in Eastern Devon. The Infection Control service will continue to be supplied by the team at the Royal Devon & Exeter Hospital via a service level agreement with NDHT.

## **3 Description of infection control arrangements**

### **Staffing and Finance**

All Consultant Medical Microbiologists contribute medical input to the IPCT. One is the Infection Control Doctor and Joint Director of Infection Prevention & Control (DIPC) for the Trust. The DIPCs are directly responsible to the Chief Executive for Infection Control issues within the Trust and report directly to the Trust Board. Another of the Consultant Medical Microbiologists is the antibiotic stewardship lead for the Trust and chairs the Antimicrobial Working Group.

The Infection Control Team is available to provide advice 24 hours a day. The out of hours service is provided by the Consultant Medical Microbiologist on call.

## **4 Infection Prevention & Control Team members 2010-11**

Band 8b	0.7 wte	Clinical Manager Infection Prevention & Control & Tissue Viability
Band 8a	1.0 wte	Lead Infection Prevention & Control Nurse,
Band 7	1.0 wte	Clinical Nurse Specialist Infection Prevention & Control
Band 7	0.61 wte	Clinical Nurse Specialist Infection Prevention & Control
Band 3	0.64 wte	Secretary
Medical	0.4 wte	Infection Control Doctor/ Consultant Medical Microbiologist Joint Director of Infection Prevention and Control
Medical	0.1 wte	Consultant Medical Microbiologist

## **5 Patient Safety and Infection Prevention & Control Committee (PSIPCC)**

In January 2010 the Infection Prevention & Control Committee incorporated the patient safety issues in the Trust and changed its title to become the Patient Safety and Infection Prevention & Control Committee (PSIPCC)

The PSIPCC is chaired by the Chief Executive and has representation from across the Trust, including the lead clinicians from medicine and surgery. The IPCC is a Special Advisory Group of and reports to the Clinical Governance Committee. The minutes are sent to the Clinical Governance Committee and are available on the Trust intranet. The Infection Prevention & Control annual report is sent to the Clinical Governance Committee and the Trust Board.

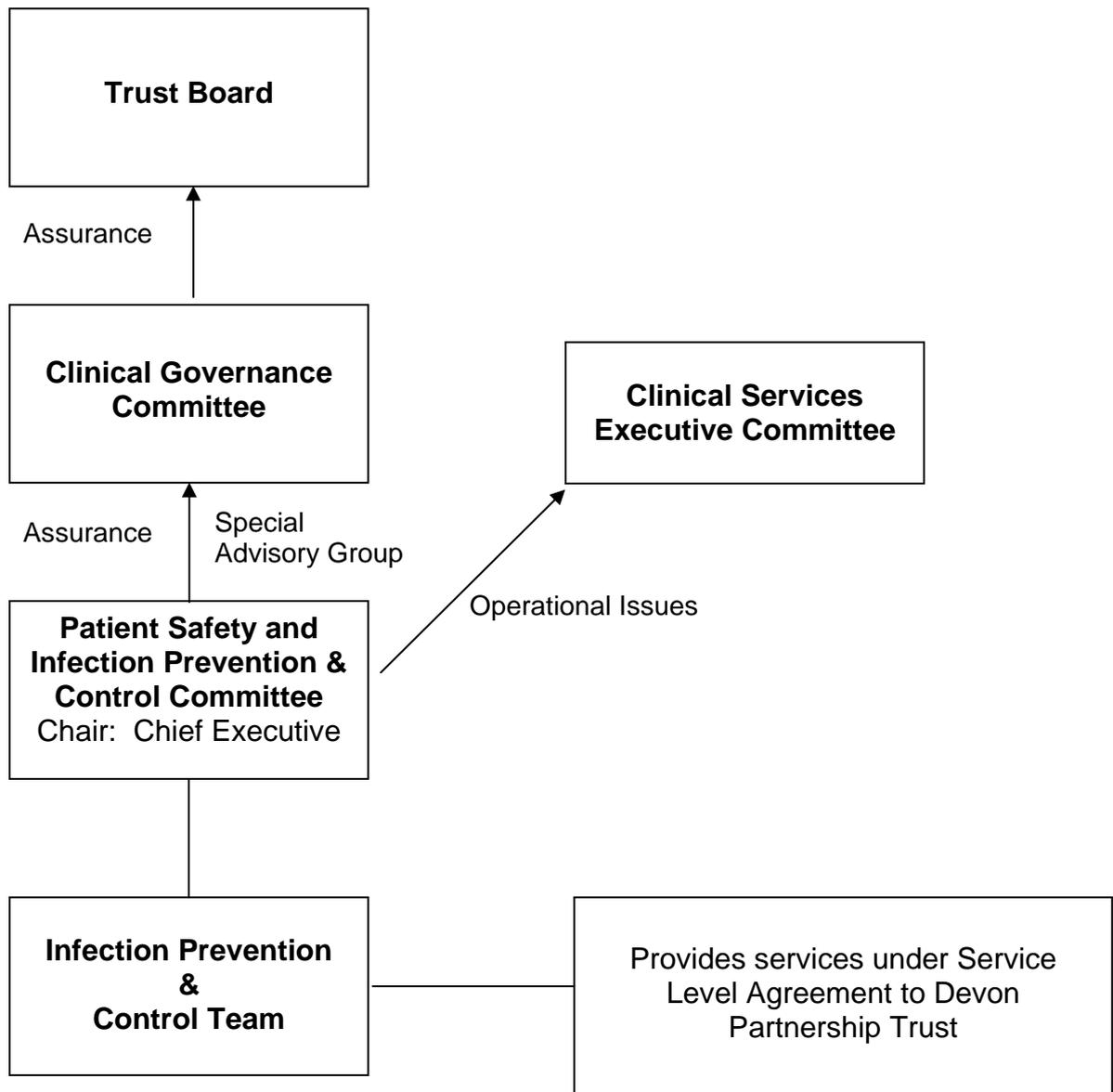
#### PSIPCC membership

- Chief Executive (Chair)
- Medical Director
- Director of Nursing/DIPC
- Infection Control Doctor/DIPC
- Clinical Manager IPC
- Lead IPCN
- Patient Safety Manager
- Lead Nurse Patient Safety
- Consultant Medical Microbiologist ( Antibiotic stewardship lead)
- Antimicrobial Pharmacist
- Assistant Director of Facilities
- Occupational Health representative
- Consultant in Communicable Disease Control (Health Protection Agency)
- PCT representative
- General Manager Medicine
- General Manager Surgery
- General Manager Women & Children
- Lead Nurse for Medicine
- Lead Nurse for Surgery
- Lead Midwife
- Allied Health professionals representative
- Health & Social Care representative
- Diagnostics & Therapeutics representative
- Anaesthesia, Theatres, Critical Care representative

Papers are copied to (attend if co-opted or specific topic on agenda)

- CSSD manager
- Clinical Governance Representative
- NHS Devon Resilience manager
- Patient Safety Working Group
- Lead clinicians

**NORTHERN DEVON HEALTHCARE TRUST**  
**ORGANISATIONAL CHART OF INFECTION PREVENTION & CONTROL**  
**ARRANGEMENTS**



**Director of Infection Prevention and Control:**

The post is held jointly by the Director of Nursing & Infection Control Doctor  
 Reports directly to Trust Board and Chief Executive  
 Member of Patient Safety and Infection Prevention & Control Committee and  
 Clinical Governance Committee  
 Leads Infection Prevention & Control Team

## **6 Reporting line to the Trust Board**

Both joint DIPCs report directly to the Trust Board, as detailed in their job description. One joint DIPC is Director of Nursing and is a member of the Trust Board.

## **7 Links to other groups and committees**

### **Links to Prescribing and Formulary Committee**

The Antibiotic Pharmacist is a member of the Drugs, Transfusions and Therapeutics Group and the PSIPCC. The Antibiotic Working Group is a subgroup of Drugs, Transfusions and Therapeutics Group with authority to make decisions regarding antibiotic use in the Trust. It is chaired by the Consultant Medical Microbiologist (Antibiotic stewardship lead) and the membership includes Consultant Medical Microbiologists (who are part of the IPCT) and pharmacists (including the Director of Pharmacy and the Antibiotic Pharmacist). Further details are given in Antimicrobial Prescribing section.

### **Links to Clinical Governance/Risk Management/Patient Safety**

The PSIPCC is a 'Special Advisory Group' of the Clinical Governance Committee and reports to it with respect to governance issues. The minutes, annual plan, annual report and terms of reference are all sent to the Clinical Governance Committee. The DIPC is a member of the Clinical Governance Committee. The lead IPCN is a member of the Trust's Health & Safety Committee.

## **8 Link Practitioners**

Link Practitioners are health care professionals, one per ward or department, who have a particular interest in Infection Control. They act as an initial point of contact for Infection Prevention & Control enquiries in the work area.

## **9 DIPC reports to the Trust Board**

The DIPC reported to all the Trust Board meetings in 2010-11. The Annual Report was presented to the Trust Board.

The Board reports included a 'dashboard' IPC report which details MRSA, MSSA and E coli bacteraemia, *Clostridium difficile* infections, hand hygiene audit results and cleanliness scores. These are all discussed in depth along with the actions that the Trust is taking to address any areas for improvement.

## **Annual Action Plan**

The Infection Control Annual Plan was agreed by the PSIPCC and progress reports are made to each quarter to the PSIPCC. A PSIPC Operational Group (DIPCs, Clinical Manager IPC, Lead Nurse IPC and Patient Safety Lead) reviews the plan in detail at least quarterly, notes achievements and sets priorities for the coming quarter.

## **Outbreak reports**

The Board received reports of outbreaks as part of the routine monthly reports.

## **10 Budget allocation to infection control activities**

The Infection Prevention & Control budget covered pay for nurses and administrative staff but not medical staff, who are funded via Pathology. The budget funds staff to the level indicated in the staffing structure. The non-pay budget is £6,404.

## **11 HCAI statistics including results of mandatory reporting**

### **11a MRSA bacteraemia**

There were 6 MRSA bacteraemias identified by the Trust. This is an increase from a total of 4 for last year. Three of the bacteraemias were acquired in the Trust, an increase from a total of 1 for last year. The Trust exceeded the limit set by the Department of Health of one such case for the year.

	<b>Total MRSA bacteraemias</b>	<b>DH &amp; SHA limit for total MRSA bacteraemias</b>	<b>Apportioned to NDHT</b> + Dept of Health criteria * NDHT criteria
2005-06	18	19	10*
2006-07	22	15	11*
2007-08	15	12	6*
2008-09	7	12	2*
2009-10	4	8	1*
2010-11	6	1	3*

### **MRSA bacteraemias**

The IPCT has continued to lead a Root Cause Analysis process for each bacteraemia acquired in the Trust, in collaboration with the clinical team caring for the patient. The results of the Root Cause Analysis were reported externally to the Primary Care Trust and internally to members of the Patient Safety and Infection Prevention & Control Committee. Learning from these look-back exercises is disseminated to health care workers and applied to practice within the Trust.

### **11b MRSA colonisation**

The IPCT monitors the numbers and locations of patients newly diagnosed as colonised with MRSA. The figures are shown in the table. The national screening programme to screen all admissions to hospital has been implemented. Analysis of local data showed a very low positivity rate amongst day-case admissions. Following discussions and agreement with the local PCT, day-case admissions, with the exception of orthopaedic cases, are not now routinely screened.

	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11
<b>NDHT</b>	212	149	203	189	233	247
<b>Community</b>	244	239	176	126	100	96
<b>Total</b>	<b>456</b>	<b>388</b>	<b>379</b>	<b>315</b>	<b>333</b>	<b>343</b>

**New MRSA colonisations**

### **11c MSSA bacteraemia**

Since January 2011 trusts have been required to report all cases of MSSA bacteraemia, in a similar way to the way MRSA bacteraemias have been reported for some years. NDHT have been investigating these bacteraemia for some time, with a more detailed examination of cases linked to hospital care.

Between January and March 2011 there were 9 MSSA bacteraemia. All of these were associated with infections acquired before admission to hospital.

At present there are no limits set by external bodies for these bacteraemia

### **11d Glycopeptide resistant enterococcus (GRE) bacteraemia**

There were no reports of glycopeptide resistant enterococcus (GRE) bacteraemias for 2010-11.

GRE are organisms that are resistant to many commonly used antibiotics, but can be treated with newer antibiotics. They do not usually cause serious infections unless the individual is severely immunocompromised. GRE bacteraemia is associated with renal and haematology units where there are immunocompromised patients and glycopeptide antibiotics are used frequently.

<b>GRE bacteraemias reported to DH for NDHT</b>						
	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11
<b>GRE bacteraemias</b>	1	2	4	0	0	0

## **11e Clostridium difficile**

The IPCT monitors all cases of *Clostridium difficile* infection (CDI). These are individuals who have diarrhoea and have *Clostridium difficile* toxin (CDT) found in their stools. Since January 2004 NDHT has been required to report all cases from people over the age of 65 years, and from April 2007 all cases from those aged over 2 years of age.

Risk factors for acquiring CDI include increasing age (especially over 65 years), other medical problems, bowel surgery and antibiotic use.

The IPCT continues to investigate all cases *Clostridium difficile* especially prior antibiotic use and links to other cases. The results of this analysis are discussed at the IPCC and the antibiotic working group so that strategies to improve practice can be implemented.

The way in which microbiology laboratories test for *Clostridium difficile* toxin is under review. Interim guidance from the Department of Health advises that a recently developed, more sensitive, test is introduced. Such a test was introduced in North Devon in October 2010. This will result in the detection of *Clostridium difficile* toxin in more patients. However not all patients with a positive result will have disease caused by the toxin as it can be carried in the gut without causing problems: called 'asymptomatic carriage'. All patients with a positive result are reviewed by a consultant medical microbiologist and managed as though they could have *Clostridium difficile* disease. All positive cases of *Clostridium difficile* toxin are reported and detailed in the tables below.

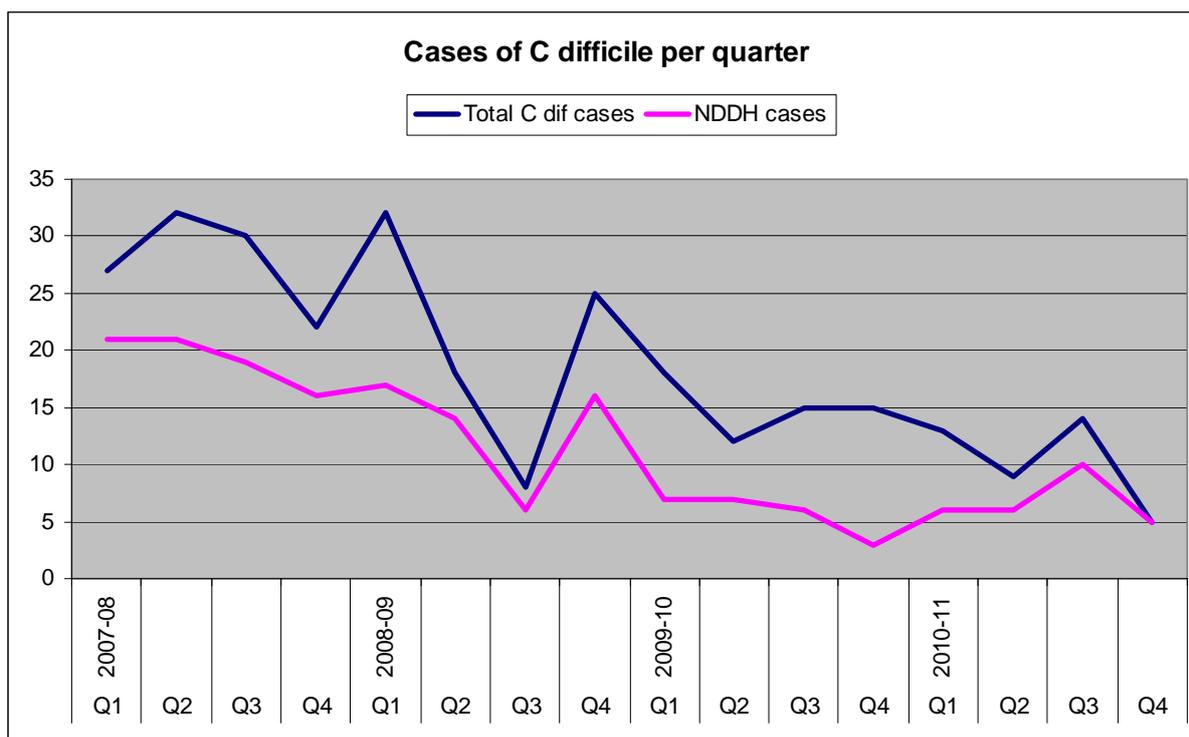
The total number of *C difficile* cases detected in North Devon was 41, however 9 of these were only detected by the new sensitive testing.

<b>Total cases of <i>Clostridium difficile</i> infection reported by NDHT for patients of all ages in North Devon</b>						
	<b>2005/6</b>	<b>2006/7</b>	<b>2007/8</b>	<b>2008/09</b>	<b>2009/10</b>	<b>2010/11</b>
<b>Usual testing</b>	226	126	111	83	60	32
<b>Extra cases detected by sensitive testing</b>						9
<b>Total</b>	226	126	111	83	60	41

The SHA set NDHT a limit of no more than 35 cases in those over 2 years of age for 2010-11. There were a total of 27 such cases in 2010-11; this is an increase from 23 in 2009-10.

However 8 of these 27 cases were detected by the new, enhanced testing. If these 8 cases are excluded then the underlying rate of *Clostridium difficile* has fallen since 2009-10.

<b>Cases of <i>Clostridium difficile</i> acquired in NDDH</b>				
<b>Number of episodes detected by:</b>	<b>2007/8</b>	<b>2008/09</b>	<b>2009/10</b>	<b>2010/11</b>
<b>Usual testing</b>	77	53	23	19
<b>Extra cases detected by sensitive testing</b>				8
<b>Total</b>	77	53	23	27



### **11f Mandatory surveillance of orthopaedic surgical site infection**

The Trust is mandated to perform surveillance of surgical site infections for one type of orthopaedic surgery for at least one quarter each year. This year the procedure of total hip replacement was chosen. One infection was detected during the patients' initial admissions or any re-admission. 102 procedures were monitored producing an infection rate of 1.0% which is slightly above the national rate of 0.8%.

In 2010-11 surveillance was also carried out for infections following operations of the large and small bowel. The infection rates were 1.9% and 3.4% respectively which are both below the national average.

Surveillance of patients following surgery is very labour intensive so each type of surgery was monitored for only 3 months. The small numbers of operations and infections in each category mean that it is difficult to compare the infection rate for NDDH with the national rate.

Surgical procedure	No. of operations	No. of infections	NDDH infection rate (%)	National infection rate (%)
Small bowel surgery	29	1	3.4	8.3
Large bowel surgery	52	1	1.9	10.9
Hip replacement	102	1	1.0	0.8

## **12 Untoward incidents including outbreaks**

### **Viral Gastro-enteritis outbreaks**

In common with other Trusts across the country NDHT in 2010-11 experienced outbreaks of viral diarrhoea and vomiting especially over the winter and spring. There were a total of 38 outbreaks where either a single bay or a whole ward was affected. In 15 of these outbreaks Norovirus was confirmed as the causative organism. The IPCT monitor affected wards at least once a day and provide advice and support to the ward staff.

When there are a significant number of ward closures, the Infection Prevention & Control Team participate in daily bed meetings at NDDH. The meetings with the Clinical Site Managers and relevant Duty and Directorate Managers ensured expert advice was available to guide operational decisions. There is a review following each significant episode of ward closures to improve management for future outbreaks.

## **13 Antimicrobial resistance**

MRSA and GRE data are mentioned elsewhere.

The number of patients in North Devon newly identified as carrying isolates of extended spectrum  $\beta$ lactamase (ESBL) producing bacteria fell slightly in 2010-11. The total of 77 ESBL isolates included 32 identified from in-patients.

The majority of these organisms were detected in urine specimens from patients in the community. Characteristically the organisms are resistant to most oral antibiotics but remain susceptible to certain intravenous antibiotics. This can make treating simple urinary tract infections difficult as a patient may need admitting to treat an infection that could otherwise have been treated with tablets at home. The spread of these organisms from person to person is prevented by the use of standard infection control precautions which are applied to every patient.

<b>ESBL isolates identified in North Devon</b>					
	<b>2006-07</b>	<b>2007-08</b>	<b>2008-09</b>	<b>2009-10</b>	<b>2010-11</b>
<b>ESBL isolates</b>	34	57	64	103	77

## **14 Hand hygiene and Aseptic protocols**

### **Hand Hygiene & Implementation of 'cleanyourhands' campaign**

Hand hygiene amongst healthcare worker remains at the core of prevention of infection and prevention of the spread of organism to patients.

Audits of hand hygiene compliance are undertaken every month by the infection control link practitioners in clinical areas. The results are fed back and displayed on notice boards at ward and department entrances. The results are discussed every month at IPCC where directorates take responsibility for improving compliance in their area. The results are presented at every Trust Board where they form part of the dashboard.

The audit results show that overall compliance has risen from last year and has averaged over 95% during the year. However analysis of staff groups shows that the compliance of some groups is greater than for others. The aim is to demonstrate 100% compliance and to have continually improving results as the Trust approaches this goal.

The Trust continued to promote the cleanyourhands campaign, through widespread availability of alcohol gel and posters encouraging hand hygiene. Though, as this national campaign has now finished, the Trust will need to rely on other ways of promoting good hand hygiene in 2011-12.

### **Application of aseptic no-touch clinical protocols, IV catheters & urinary catheters**

Policies are in place for these areas which take into account the EPIC guidance published in 2001 & 2007, they also comply with the requirements of the Health Act 2008 (The Code of Practice for the Prevention and Control of Health Care Associated Infections). The policies are regularly reviewed. The Patient Safety Team undertakes audits of these protocols and feeds results back to directorates and the PSIPCC.

## **15 Decontamination**

There is a central sterile services department situated next to the main theatre complex which processes all Trust items for sterile reprocessing. There are 3 double endoscope washer-disinfectors in the refurbished endoscopy suite.

## **16 Cleaning services**

Services are contracted out to Sodexo and monitored through a partnering agreement. There are regular (thrice-yearly) meetings of the Partnering Board where the Trust and Sodexo formally discuss the cleaning arrangements. In addition there is a good collaborative working relationship between Trust staff including the IPCT and the staff of Sodexo. There are 'zone co-ordinators' that liaise with ward managers concerning any local cleaning issues. The IPCT liaise with the Sodexo team should any increased cleaning be required, such as during outbreaks.

A gap analysis by the IPCT with the Trust Facilities team against the national cleaning standards was undertaken to ensure that infection control was paramount when deciding on choices about cleaning frequencies.

The ICPT worked successfully with Sodexo and Trust Facilities managers on examining how to blend the '5 moments' of hand hygiene standards with housekeeping routines.

### **PEAT/Patient forum inspection results**

In assessments performed by the patient environment action teams (PEAT) in 2010 NDDH and all the community hospitals achieved scores of:

	Environment Score	Food Score
North Devon District Hospital	Excellent	Good
Holsworthy Hospital	Excellent	Excellent
Bideford Hospital	Excellent	Excellent
Torrington Hospital	Good	Excellent
South Molton Hospital	Excellent	Excellent

## **17 Audit**

Infection control audits were co-ordinated through the Infection Control Link Practitioners and Matron's Charter Group on a rolling annual programme. The Patient Safety Team also performs regular audit. Audit results are discussed by PSIPCC and the Matron's Charter group and actions arising from these placed on the risk register.

Audits undertaken this year include:

- Prevention of surgical site infection (bundle of actions)
- Hand hygiene audit – see Hand Hygiene section.
- Ward cleanliness audit – see Matron's Charter section
- Patient environment & equipment
- Patient Environment Action Team (PEAT) cleanliness inspections
- Insertion and care of peripheral and central intravenous lines
- Care of ventilated patients

## **18 Matron's Charter**

The Matron's Charter Group continued to meet during the year and reports made to the PSIPCC. The group is chaired by the Director of Nursing and includes the IPCT, senior nurses from the Trust, representatives from facilities and Sodexo. The agenda of the group is set by the Charter and therefore has a strong emphasis on cleanliness. The group has taken many issues forward including the new cleaning standards, PEAT inspections, MRSA, the 'cleanyourhands' campaign and training of staff. Through the group the Trust organised an annual 'declutter weekend' when unwanted equipment and furniture is removed from wards.

There is a rolling program of audits which include decontamination, ward cleanliness, PEAT, sharps, sluice room audit and Sodexo's audit program.

The group produces a monthly bulletin which follows each meeting and is distributed across the Trust. The bulletin includes key points from the previous meeting as well as other relevant information on cleanliness and infection control topics that need to be relayed to staff.

## **19 Antibiotic prescribing**

### **Antibiotic Working Group Annual Report 2010/2011**

The Antibiotic Working Group (AWG) is a sub-group of the Drugs and Therapeutics Group with the power to make decisions regarding antibiotic use within the Trust. The primary purpose of the AWG is to ensure that antimicrobial prescribing practice throughout the Northern Devon Healthcare Trust is safe, effective, appropriate and economic. It also provides support for implementation of guidance and auditing compliance. The group will ensure appropriate prescribing policies are in place which are in line with best practice and take into account Department of Health guidance. The minutes and the terms of reference of the AWG can be accessed on the Trust intranet.

#### **Current Membership of Antibiotic Working Group**

Consultant Medical Microbiologist	Antibiotic Pharmacist
Consultant Medical Microbiologist (Antimicrobial Stewardship lead)	Consultant Physician (Medicine)
Consultant Medical Microbiologist / DIPC	Consultant Surgeon
Director of Pharmaceutical Services	Consultant Paediatrician

Others co-opted as required.

PCT pharmacists included in distribution of agenda and minutes and welcome to attend meetings.

#### **Key developments in 2010/11**

<b>Guidelines completed and available on hospital intranet</b>	<b>Date of ratification</b>
Paediatric and neonatal Gentamicin 5mg/kg Guideline	Jun 2010
Adult Extended Interval Gentamicin 5mg/kg Guideline	Nov 2010
Vancomycin Prescribing in Adults Guideline	Nov 2010
Neutropenic Sepsis Guidelines (Including management of Febrile Neutropenia / Neutropenic fever)	Jan 2011
Antibiotic guidelines for Management of Severe sepsis and Septic Shock	May 2011
Antibiotic guidelines for urological indications in Secondary Care	May 2011
Antibiotic guidelines for skin, soft tissue, bone and joint indications	May 2011

#### **Guidelines in progress, awaiting ratification**

Gastroenterology including SBP; Ophthalmology; Gentamicin community guideline, Primary Care Infection Guidelines

#### **Data collection**

1. Trust antibiotic cost data
  - a. Total antibiotic costs have reduced, mainly due to reductions in carbapenem usage, and a change of preferred carbapenem (imipenem to meropenem).
  - b. Total carbapenem usage has decreased by 40%, notably in medicine and intensive care
2. Ward antibiotic usage data.
  - a. % of patients in NDDH on antibiotics is in line with national data

- b. Ward based surveys show adherence to antibiotic protocols is generally good.
- 3. Usage of high cost/broad spectrum antibiotics
  - a. Carbapenem use has reduced. Linezolid, Tazocin, IV clindamycin, IV clarithromycin usage remains broadly stable.
- 4. Usage of high risk antibiotics for *C difficile*.
  - a. Usage of co-amoxiclav has increased in obstetrics/gynaecology and surgery
  - b. Usage of quinolones, clindamycin and cephalosporins remains low
- 5. Annual point prevalence data for benchmarking (see SWAP in 'links to other groups' section)
- 6. Community Hospital Antibiotic Prescribing
  - a. Use of antibiotics in the community hospitals was considered and generally appropriate.
  - b. There was little use of high risk antibiotics for *C difficile*.

#### **Current actions**

- i. Review of indications for co-amoxiclav in current guidelines
- ii. Reasons for inappropriate prescribing being collated for feedback to directorates

#### **Patient safety data**

- 1. Monitoring Healthcare Associated Infection (HCAI) rates.
  - a. Approx 25% antibiotic prescriptions were for HCAs (Catheter associated urinary tract infections (CAUTI) were the most common cause)
- 2. Incident report review including learning points and actions (e.g. Missed doses and dose errors, penicillin used in penicillin-allergic patients)
  - a. Reviewed quarterly
- 3. Gentamicin and vancomycin patient data (monitoring post exposure renal function)
  - a. Reviewed annually – data so far shows no lasting adverse effects from use of these drugs.
- 4. NPSA (National Patient Safety Agency) alerts and NICE (National Institute for Health and Clinical Excellence ) guidance reviewed and implemented where appropriate
- 5. Mortality and length of stay data for common infections.
  - a. Data shows no change in these outcome measures over past 12 months.

#### **Current actions**

- i. CAUTI workstream to address high incidence of hospital infections
- ii. Penicillin allergy policy under review

## **Activities in progress in 2011**

### **Links to other groups**

1. South West Antibiotic Pharmacist (SWAP) group. Bi-annual meeting to share guidelines, specialist information, prevalence data and benchmarking.
2. Infection control. Share data on catheter associated urinary tract infections and carry out antibiotic histories for all *C. difficile* positive patients for use in RCA

### **Education, Training and Communication**

1. Primary care, improving communication and information/ availability to GPs
2. Grand round presentations
3. Junior doctor induction and rolling programme of mandatory training
4. Attendance at Directorate meetings (orthopaedics, surgery) to discuss current plans and introduce new guidelines.

### **Guidelines to be developed**

1. General surgery including prophylaxis
2. Penicillin allergy
3. Respiratory
4. Primary care
5. Obstetrics and gynaecology
6. ENT

### **Audits**

Rolling audit programme for all published guidelines to be developed with relevant specialties, against their set standards

## **20 Performance limits/outcomes**

### **MRSA bacteraemia**

There were 6 MRSA bacteraemias identified by the Trust. This is an increase from a total of 4 for last year. Three of the bacteraemias were acquired in the Trust, an increase from a total of 1 for last year. The Trust exceeded the limit set by the Department of Health of one such case for the year.

The IPCT has continued to lead a Root Cause Analysis process for each bacteraemia acquired in the Trust, in collaboration with the clinical team caring for the patient. The results of the Root Cause Analysis were reported externally to the Primary Care Trust and internally to members of the Patient Safety and Infection Prevention & Control Committee. Learning from these look-back exercises is disseminated to health care workers and applied to practice within the Trust.

### ***Clostridium difficile***

The Devon Primary Care Trust set NDHT a limit of no more than 35 cases in those over 2 years of age for 2010-11. There were a total of 27 such cases in 2010-11 increased from 23 in 2009-10. This increase is due to the introduction of a more sensitive test which detected a further 8 cases.

The IPCT continues to investigate with the clinical teams all cases of *Clostridium difficile* infection. The results of this analysis are discussed at the IPCC and the antibiotic working group so that strategies to improve practice can be implemented.

### **The Health and Social Care Act 2008 (Code of Practice on the prevention and control of infections and related guidance)**

The Trust is registered with the Care Quality Commission as fully compliant with the Code.

## **21 Training activities**

Education of the Trust staff in the prevention and control of infection is a very important part of the Trust's strategy in containing the number of HCAs. The IPCT are pivotal in co-ordinating and providing the majority of this education.

### **Infection Prevention & Control training at induction for staff**

At induction every member of staff receives Infection Control training by a member of the IPCT. This ensures that every new member of the Trust is aware of the basic principles of Infection Prevention & Control. Bank and many agency nursing staff receive training before starting work. There is a basic electronic learning package with compulsory question and answer section at the end which is used for junior doctors prior to starting their posts.

### **Annual Infection Prevention & Control training for staff**

All staff are required to undertake an annual Infection Control update. Training was delivered both by traditional 'face-to-face' methods and by e-learning. The Trust is developing a bespoke e-learning package which will be introduced in 2011-12.

Doctors represent a particular group with respect to their educational requirements. Despite its importance Infection Prevention & Control is often poorly taught at medical school and doctors often not included in other teaching sessions because of their work commitments and the short-term contract of many junior doctors. All junior doctors receive Infection Prevention & Control training as part of their induction programme. IPC teaching occurs at regular departmental meetings and audit sessions. IPC is part of the mandatory training that all newly qualified doctors receive in their F1 & F2 years.

Staff also receive education about particular aspects of Infection Prevention & Control as, for example, part of training for venepuncture / cannulation or IV drug administration. If a new policy is introduced then specific training is required to support this.

### **Delivery of 'Practice & Principles of Infection Control' course**

The Infection Prevention & Control Team delivers an Infection Prevention & Control course at diploma and degree level in partnership with the University of Plymouth. The course, 'Practice & Principles of Infection Control', provides 20 credits at level 2 and 3. It is open to registered nurses in the public and private sectors but the majority of attendees are from the Trust, many of whom are, or become, Link Practitioners.

### **Link Practitioners**

Link Practitioners are healthcare workers, usually one per ward or department, who have a particular interest in Infection Prevention & Control. They attend meetings, participate in audit and act as an initial point of contact for Infection Prevention & Control inquiries in the work area.

### **Education of the IPCT**

Members of the IPCT attend educational events throughout the year. These include the Infection Control Nurses Association annual conference and DH events including those arranged specifically for Directors of Infection Prevention & Control. The IPCNs are members of the regional Health Protection Nurse forum. The lead IPCN is the chair of the Southwest regional Infection Prevention Society.

## **22 Care Quality Commission Inspection**

Over 3 days in March 2011 the Care Quality Commission performed a routine, unannounced inspection of NDDH. The Commission assessed the Trust for its compliance with the Essential Standards of Quality and Safety. Regulation 12, Outcome 8 relates to infection control and the Hospital's compliance with the Code of Practice on healthcare associated infections and related guidance.

The Commission's judgement concerning Outcome 8 (Cleanliness and infection control) is:

"North Devon District Hospital was very clean and well maintained. Equipment was of a high standard and promoted infection control. Staff used appropriate precautions to minimise infection risk and ensure that people understood these whether they were a patient or a visitor.

Overall, we found that North Devon District Hospital was meeting this essential standard."

## **23 Legionella control**

The Northern Devon healthcare NHS Trust has through the Facilities directorate a program of control measures in place to reduce the risk of Legionella within the Trusts Estate water services; Within this control program there are defined roles for all individuals in providing this and key areas have been identified with defined measures in place to reduce the risk of Legionella.

The Trust has a named 'Responsible Person' for Water services who liaises closely with other professionals in various disciplines. In doing so the following areas are addressed:-

Planned Maintenance is planned and delivered based on Statutory, mandatory and recommended HSC good practice guidance. This ensures that the NDHCT has an active and comprehensive Legionella control program which uses a temperature control process (thermal disinfection) to control Legionella. This is endorsed by a regular program of monitoring of stored and delivered water temperatures across the Trust estate.

Alterations, development and changes in use affecting the water systems in the Trust are all carried with full compliance to the Trusts Legionella control requirements.

In respect to monitoring and sampling there have not been any positive Legionella tests from patients or environmental samples associated with the Trust as source this year.

A visit by the HSE inspectorate in February 2011 identified no issues or concerns over the Trusts management of Legionella.