



**Hospital Infection Society**



**Infection Control Nurses Association**

**The Third Prevalence Survey  
of  
Healthcare Associated Infections  
In  
Acute Hospitals  
2006**

**England**  
**Summary of Preliminary Results**  
**27 February 2007**

## Prevalence Rates

Total Patients Surveyed	Number of Patients with Healthcare Associated Infections	Prevalence Rate*	95% confidence interval
58775	4812	8.19	7.97 – 8.41

\* Prevalence Rate =

$$\frac{\text{Number of patients with infections}}{\text{Total number of patients surveyed}} \times 100$$

Infection Type	Infection Type Prevalence Rate	95% confidence interval
Bone and Joint	0.11	0.09 – 0.14
Cardiovascular System	0.10	0.08 – 0.13
Central Nervous System	0.02	0.01 – 0.04
Eyes, ENT or Mouth	0.27	0.23 – 0.31
Gastrointestinal System	2.02	1.91 – 2.13
Lower Respiratory Tract (not pneumonia)	0.55	0.50 – 0.62
Pneumonia	1.27	1.19 – 1.37
Primary Bloodstream	0.62	0.56 – 0.69
Reproductive Tract	0.06	0.04 – 0.08
Skin & Soft Tissue	0.96	0.88 – 1.04
Surgical Site		
All patients surveyed	1.27	1.18 – 1.36
Patients who had surgical procedure(s)	4.65	4.33 – 4.99
Systemic	0.11	0.09 – 0.14
Urinary Tract	1.80	1.70 – 1.91

\* Infection Type Prevalence Rate =

$$\frac{\text{Number of patients with specific type of infection}}{\text{Total number of patients surveyed}} \times 100$$

## Types of Healthcare-associated Infections

Infection Type	Percentage of Total Healthcare-associated System Infections
Bone and Joint	1.2 %
Cardiovascular System	1.1 %
Central Nervous System	0.3 %
Eyes, ENT or Mouth	2.9 %
Gastrointestinal System	22.0 %
Lower Respiratory Tract (not pneumonia)	6.0 %
Pneumonia	13.9 %
Primary Bloodstream	6.8 %
Reproductive Tract	0.6 %
Skin & Soft Tissue	10.5 %
Surgical Site	13.8 %
Systemic	1.2 %
Urinary Tract	19.7 %

## Prevalence Rates by Specialty

Consultant specialties are aligned with the specialties recognised in the European Medical Qualifications Order 1995 and European Primary and Specialist Dental Qualifications Regulations 1998. These reflect the consultant managing the patient on a day to day basis. Ward specialties were assigned during the survey to reflect the type of ward.

Specialty	Specialty Prevalence Rate*	
	Consultant Specialty	Ward Specialty
Blood and Marrow Transplantation	18.46	-----
Breast Surgery	3.04	1.82
Burns Care	22.86	18.07
Cardiac Surgery	12.13	9.70
Cardiology	5.96	5.31
Cardiothoracic Surgery	12.58	8.44
Cardiothoracic Transplantation	18.87	31.25
Care of the Elderly also known as Geriatric Medicine	10.00	10.68
Clinical Haematology	14.59	11.29
Clinical Immunology	9.09	-----
Clinical Microbiology	4.08	-----
Colorectal Surgery	11.02	7.91
Coronary Care Unit - <i>Ward specialty only</i>	-----	3.72
Critical Care Medicine also known as Intensive Care Medicine	23.16	24.51
Dermatology	3.48	5.77
Endocrinology	9.03	7.18
ENT	3.94	3.70
Gastroenterology	6.99	6.01
General Medicine	7.72	8.09
General Surgery	8.14	7.08
Genito-urinary Medicine	1.90	4.76
Gynaecology	4.81	4.40

\* Specialty Prevalence Rate =

$$\frac{\text{Number of patients with infections in specific specialty}}{\text{Total number of patients surveyed in specific specialty}} \times 100$$

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## Prevalence Rates by Specialty

Specialty	Specialty Prevalence Rate	
	Consultant Specialty	Ward Specialty
Hepatobiliary & Pancreatic Surgery	10.79	5.94
Hepatology	14.71	8.18
Infectious Diseases	7.83	12.66
Maxillo-Facial Surgery	2.50	1.67
Medical High Dependency - <i>Ward specialty only</i>	-----	16.92
Medical Oncology	6.36	8.48
Nephrology	13.36	12.91
Neurology	7.78	7.07
Neurosurgery	10.90	9.93
Obstetrics	0.76	0.58
Ophthalmology	0.00	1.28
Oral Surgery	0.00	0.00
Orthodontics	0.00	-----
Pain Management	8.33	-----
Palliative Medicine	6.10	-----
Plastic Surgery	4.81	5.12
Respiratory Medicine also known as Thoracic Medicine	7.65	7.61
Restorative Dentistry	14.29	-----
Rheumatology	4.53	4.92
Surgical High Dependency - <i>Ward specialty only</i>	-----	14.04
Thoracic Surgery	10.15	10.61
Transplantation Surgery	21.57	15.15
Trauma & Orthopaedics	8.74	8.45
Tropical Medicine	5.88	-----
Upper Gastrointestinal Surgery	9.16	9.67
Urology	5.78	5.49
Vascular Surgery	10.48	8.43
Others	10.93	6.67

## MRSA Prevalence Rates

Total Patients	Number of patients with infections where MRSA was the causative organism	MRSA Prevalence Rate*	95% confidence interval
58775	755	1.28	1.20 – 1.38

\* MRSA Prevalence Rate =

$$\frac{\text{Number of patients with infections where MRSA was the causative organism}}{\text{Total number of patients surveyed}} \times 100$$

Infection Types	Percentage of Infection Type with MRSA as Causative Organism	Infection Type MRSA Prevalence Rate*
Bone and Joint	28.1 %	0.03
Cardiovascular System	19.7 %	0.02
Central Nervous System	14.3 %	<0.01
Eyes, ENT or Mouth	29.3 %	0.08
Lower Respiratory Tract (not pneumonia)	15.7 %	0.09
Pneumonia	7.3 %	0.09
Primary Bloodstream	22.4 %	0.14
Reproductive Tract	22.9 %	0.01
Skin & Soft Tissue	49.1 %	0.47
Surgical Site Patients who had surgical procedure(s)	27.6 %	1.28
Systemic	10.8 %	0.01
Urinary Tract	4.7 %	0.09

\* Infection Type MRSA Prevalence Rate =

$$\frac{\text{Number of patients with specific infection type where MRSA was the causative organism}}{\text{Total number of patients surveyed}} \times 100$$

## ***Clostridium difficile* Prevalence Rate**

Total Patients	Number of Patients with <i>Clostridium difficile</i> diarrhoea	<i>Clostridium difficile</i> Prevalence Rate*	95% confidence interval
58775	1163	1.98	1.87 – 2.09

\* *Clostridium difficile* Prevalence Rate =

$$\frac{\text{Number of Patients with } \textit{Clostridium difficile} \text{ diarrhoea}}{\text{Total number of patients surveyed}} \times 100$$

## **Norovirus Prevalence Rate**

Total Patients	Number of Patients with Confirmed/Suspected Norovirus	Norovirus Prevalence Rate*	95% confidence interval
58775	434	0.74	0.67 – 0.81

\* Norovirus Prevalence Rate =

$$\frac{\text{Number of Patients with Confirmed/Suspected Norovirus}}{\text{Total number of patients surveyed}} \times 100$$