

*New legislation was passed into law on April 1 2009 that has granted a new government body the power to enforce new infection control requirements with an aim to improving hygiene and reducing MRSA and Clostridium difficile outbreaks*

### **Code of Practice cracks down on hospital infection**

The [Health and Social Care Act of 2008](#) received Royal assent on 22 July 2008 and contains significant measures to modernise and integrate health and social care in England, Wales and Northern Ireland.

The [Code of Practice](#) contained within the Act came into force on 1 April 2009 and set out how the new government body in charge of inspecting all NHS and private hospitals – the [Care Quality Commission](#) (CQC) – will assess compliance with the requirements.

The Code also provides guidance on how providers can meet the registration requirements relating to healthcare associated infections (HCIs) set out in the [Regulations](#).

### **Care Quality Commission can impose fines and close wards**

The [Department of Health](#) set out proposed powers for the Care Quality Commission (CQC), the government inspectorate that replaced the [Healthcare Commission](#), the Commission for Social Care Inspection and the Mental Health Act Commission on April 1 2009.

The CQC now oversees inspections of all English NHS and private hospitals, as well as care homes for the elderly, GP surgeries and private clinics (1).

The Health and Social Care Act 2008 requires hospitals and clinics to register for an operating licence with the CQC, which will be conditional on meeting minimum standards on hygiene (1).

CQC inspectors will have powers to prosecute failing hospitals and clinics, and impose fixed penalty fines or close wards, clinics or services (1).

For example, hospitals that do not meet minimum hygiene standards will be issued with fixed penalty notices with fines of up to £4,000. Obstructing an inspector or failing to provide documents or information will attract fixed penalty fines of £1,250 (1).

Serious offences such as failure to act on an improvement notice following an outbreak of infection could lead to prosecution and a maximum £50,000 fine (1).

### **Is the NHS delivering on hygiene?**

Each year the Healthcare Commission asks all NHS trusts to declare their level of compliance against the 44 parts of the government's 24 core standards.

Three standards relate to the hygiene code: infection control, decontamination and clean environments.

In 2006 to 2007, all three hygiene code standards appeared in the list of the six standards with the lowest compliance rates, with compliance against all three also having fallen compared with 2005 to 2006 (2).

In 2007 to 2008, two of the three again appeared in the list of the six standards with the lowest compliance rates, with compliance against one of the three having deteriorated annually once again (2).

- **Infection control**

Over the three years of the annual health check, the national compliance rate for infection control fell from 92 per cent in the period 2005 to 2006 to 84 per cent in the period 2006 to 2007, rising again to 88 per cent in 2007 to 2008 (2)

- **Decontamination**

The national compliance rate for decontamination was 87 per cent in 2005 to 2006, 85 per cent in 2006 to 2007, and dropped further to 77 per cent in 2007 to 2008 – the lowest level for any standard in any of the three assessment years compiled by the Healthcare Commission (2)

- **Clean environments**

Compliance rates for clean environments were 90 per cent in 2005 to 2006, 88 per cent in 2006 to 2007 and rose back to 90 per cent again 2007 to 2008 (2)

One hundred and fourteen trusts – a quarter of the NHS – failed to meet one or more of the three core standards relating to infection control in 2007 to 2008, up from 111 trusts in 2006 to 2007. Only 52 per cent of acute trusts met the target to reduce rates of MRSA by at least 60 per cent over three years (or a maximum of 12 cases of infection) (3).

When performance against the hygiene code-related standards is combined with performance against the MRSA target, 40 per cent of acute and specialist trusts complied with all three standards and achieved the MRSA target in 2007 to 2008 – a slight increase on 36 per cent in the previous year (2006 to 2007) (2).

### **Patients don't believe hospital hygiene has improved**

A national NHS patient survey programme published in 2008 by the Healthcare Commission polled 165 NHS trusts and 75,000 patients (4).

The Survey of Adult Inpatients in the NHS has been published every year since 2002. Three questions on the survey ask patients about the cleanliness of the hospitals at which they were treated.

For the question “How clean was the hospital room or ward that you were in?” the 2007 survey showed a significant decrease in the “very clean” rating at 53 per cent compared with 56 per cent in the 2002 survey (4).

For the question “How clean were the toilets and bathrooms that you used in hospital?” the 2007 survey again showed a significant decrease in the “very clean” rating at 47 per cent compared with 51 per cent in the 2002 survey (4).

For the question “As far as you know, did doctors wash or clean their hands between touching patients?” the 2007 survey also showed a significant decrease in the “yes always” rating at 68 per cent compared with the 2005 rating of 69 per cent (4).

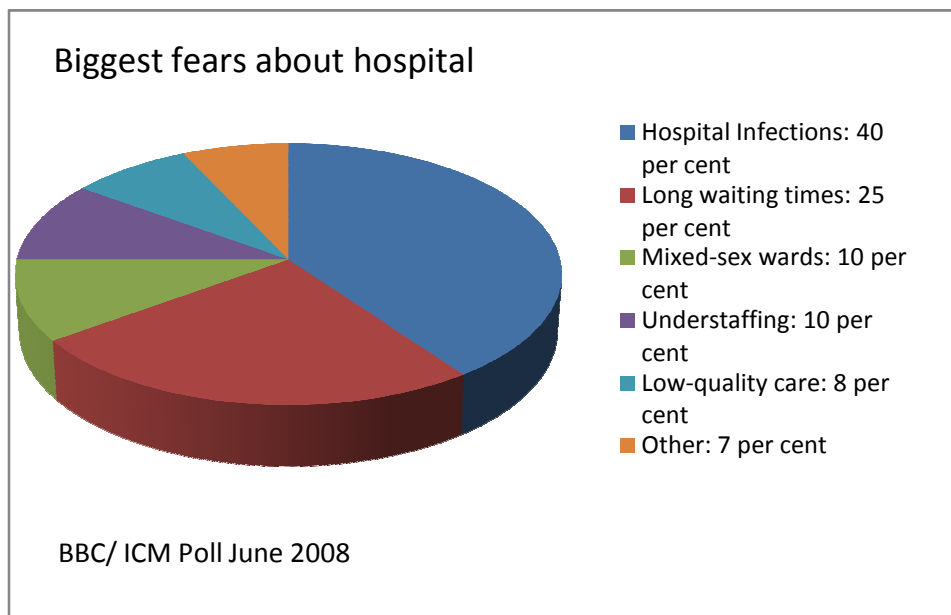
**Table 1:** Survey of adult inpatients 2007 – best and worst hospitals rated for cleanliness (4)

NHS trust	Location	Scores out of 100 for patients rating hospital room or ward as clean
<b>BEST RATED HOSPITAL TRUSTS BY PATIENTS</b>		
Queen Victoria Hospital NHS Foundation Trust	East Grinstead, West Sussex	94.6
Robert Jones and Agnes Hunt Orthopaedic and District Hospital NHS Trust	Oswestry, Shropshire	94.0
The Cardiothoracic Centre - Liverpool NHS Trust	Liverpool	92.7
Walton Centre for Neurology and Neurosurgery NHS Trust	Liverpool	92.5
Clatterbridge Centre for Oncology NHS Trust	Wirral	92.1
<b>WORST RATED HOSPITAL TRUSTS BY PATIENTS</b>		
Homerton University Hospital NHS Foundation Trust	London	71.8
Ealing Hospital NHS Trust	London	72.5
North West London Hospitals NHS Trust	London	72.5
The Hillingdon Hospital NHS Trust	London	73.4
Mayday Healthcare NHS Trust	Croydon	73.7

### **BBC Poll shows biggest fear is hospital infection**

[A BBC/ ICM poll](#) published in June 2008 surveyed 1,040 people asking them about their attitudes to hospital care. Forty per cent said that their biggest concern was the risk of potentially deadly infections such as MRSA and Clostridium difficile (5).

**Figure 1:** Results of BBC/ ICM poll – the public’s biggest fears about hospital



When asked how confident they were about various aspects of the NHS, only 33 per cent of respondents in the BBC survey were confident that the NHS would protect them from contracting an infection in hospital (5).

Around a third (31 per cent) of those questioned said they would consider not having an operation they needed because of the risk of getting an infection (5).

Looking at the NHS overall, the BBC poll revealed high levels of confidence in the NHS with 82 per cent saying they were 'very proud' or 'fairly proud' of the NHS and only 18 per cent saying they were 'not proud' (5).

#### INFO BOX:

##### What is MRSA?

MRSA stands for methicillin-resistant *Staphylococcus aureus*, an infectious bacterium resistant to the antibiotic methicillin and other antibiotics of the penicillin class. MRSA infections are a particular problem in hospitals. Some patients have MRSA on their skin or inside their noses without it doing them any harm (colonised patients), but these patients may develop infections if the MRSA spreads from the colonised skin area to an open wound.

##### What is *Clostridium difficile*?

*Clostridium difficile* (CDF or *C. diff*) are a type of hospital-acquired bacteria identified as the cause of diarrhoea and colitis due to treatment with certain types of antibiotics in hospitals. Antibiotics kill off "good" bacteria in the gut, leaving *Clostridium difficile* to grow out of control, especially in elderly patients.

#### Are levels of healthcare associated infections rising?

There were 966 cases of MRSA bloodstream infections reported in England during the January to March quarter of 2008, which represented an 11 per cent decrease on the previous quarter (October to December 2007) when 1,088 reports were received (6).

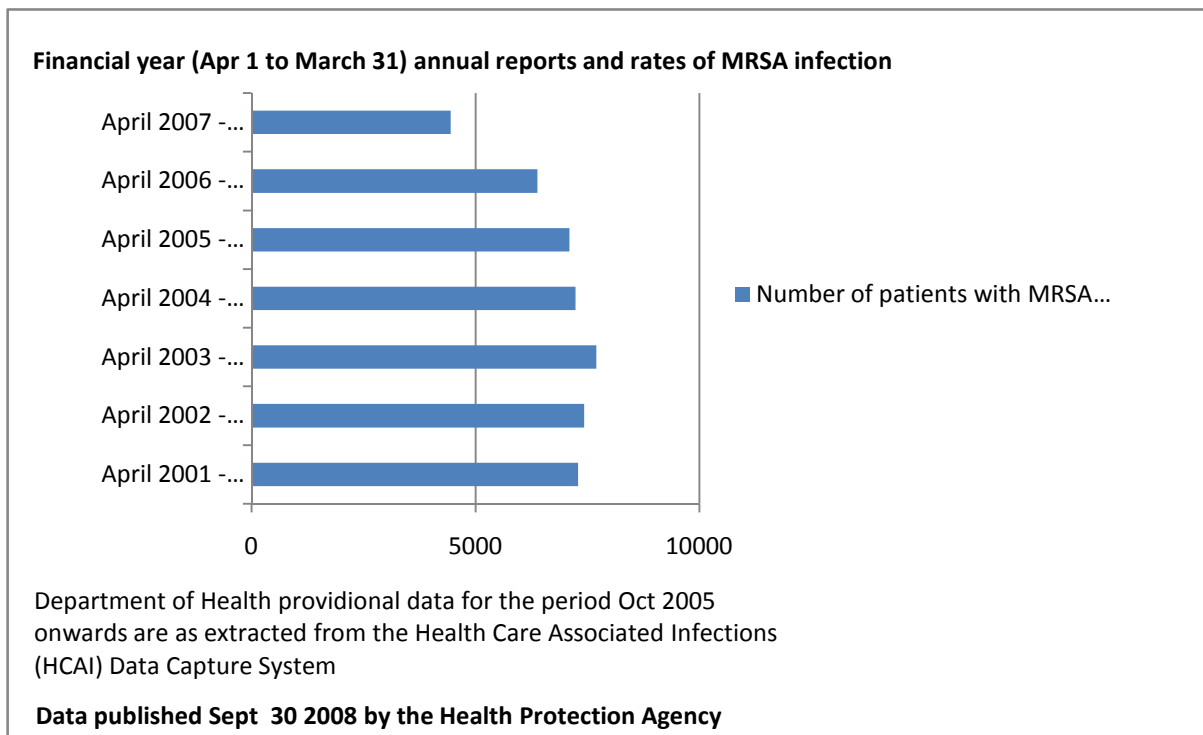
In the financial year 2007 to 2008, there was a 30 per cent decrease in the number of MRSA bloodstream infections reported (4,438), compared with financial year 2006 to 2007 (6,383). This is the fourth yearly decrease in MRSA bloodstream infection cases and the most pronounced fall, according to the Healthcare Commission (6).

Clostridium difficile figures show that there were 10,586 cases reported in patients aged 65 years and over in the first quarter of 2008 (January to March). This represented a six per cent increase in reported cases in this age group from the previous quarter (October to December 2007) (9,993 cases). The first quarter 2008 figure does however reflect a 32 per cent reduction on the same quarter last year (15,644 cases) (6).

Between January and December 2007 there were 50,392 cases of Clostridium difficile reported in patients aged 65 years and over, which represented a nine per cent decrease on the previous calendar year when 55,635 cases were reported (between January and December 2006) (6).

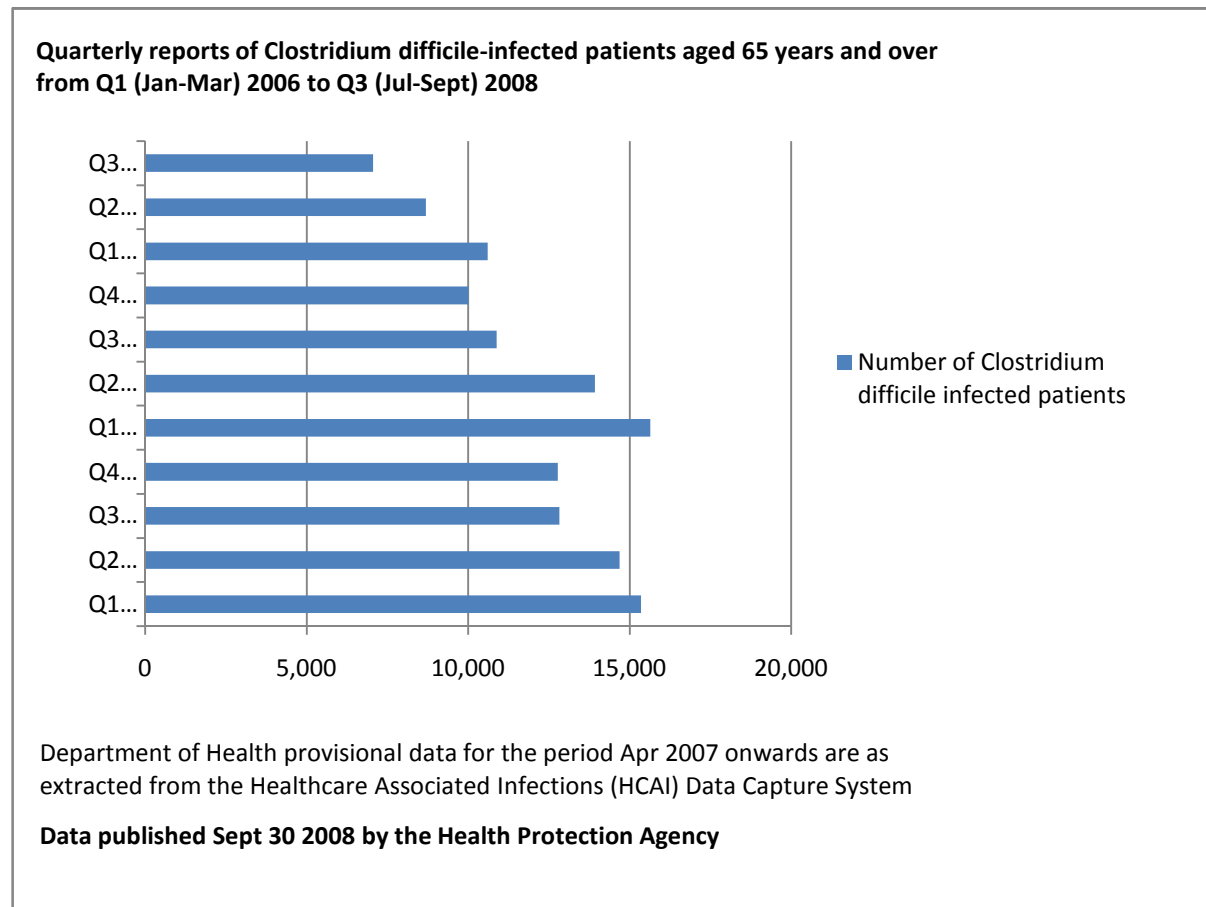
Between April 2007 and March 2008 there were 45,334 cases of Clostridium difficile reported in patients aged 65 years and over (6). Quarterly figures are somewhat skewed by increased admissions of elderly people in the cold winter months.

**Figure 2:** in the 2007 financial year (April 2007 to March 2008) the number of MRSA cases fell to 4,438 – 588 above the target, according to [Health Protection Agency data](#) (8)



**Figure 3:** The first quarter of 2008 revealed that the number of patients with Clostridium

difficile infections increased six per cent after a general trend of reduced infections but continued to fall in the next two quarters, according to [Health Protection Agency data](#) (8)



### How does the UK compare with other countries?

The European Antimicrobial Resistance Surveillance System (EARSS) has said the UK has high levels of MRSA compared with other European countries (9).

EARSS collects data from a large sample of laboratories in various European countries to find out what proportion of bloodstream infections with the Staphylococcus aureus (SA) bacterium are caused by methicillin-resistant strains (MRSA).

EARSS 2007 data shows the proportion of Staphylococcus aureus bacteria in each country that is methicillin resistant, but does not show the how common MRSA infection is.

**Table 2:** EARSS MRSA susceptibility 2007 data in selected European countries (10)

Country	% MRSA susceptibility
Greece	48.0%
United Kingdom	35.6%
Spain	25.5%
Belgium	23.3%
Germany	16.3%

Czech Republic	12.9%
Netherlands	1.4%
Sweden	0.5%
Norway	0.1%
(EARSS database Feb 26 2009)	

### **MRSA infection by medical specialty**

The Department of Health (DoH) has launched a surveillance scheme which requires every NHS trust in England to report all cases of MRSA blood poisoning (bacteraemia) to give a better overview of MRSA levels in the country.

The DoH's Mandatory Surveillance of Healthcare Associated Infections Report (2006) revealed that the majority of patients with MRSA blood poisoning were admitted to general medical, general surgical or care of the elderly wards, because these specialties have the highest volume of patients (11).

Among patients with MRSA bloodstream infections, 15 per cent were in intensive care or a high dependency ward when the infection was detected, while eight per cent of the episodes of MRSA bacteraemia were reported in patients receiving dialysis treatment (11).

MRSA bloodstream infection by hospital specialty was analysed for those records where MRSA was detected two or more days after admission, which meant that the infection was likely to have been acquired during that hospital admission.

Rates of MRSA bloodstream infection per 10,000 bed days were calculated for the ten most commonly reported specialties for cases of MRSA bloodstream infection during the period April 2006 to March 2008, using Hospital Episode Statistics (HES) data for the period 2005 to 2006 and 2006 to 2007 (11).

Specialties with the highest rates were nephrology and gastroenterology, while those with the lowest rates were trauma and orthopaedics and elderly care (11).

High rates do not suggest a high MRSA bloodstream infection count, but demonstrate a higher proportion of MRSA bloodstream infections in relation to bed days within that specialty (11).

Actual counts of MRSA bacteraemia were highest in general medicine and general surgery, at 2416 and 1252 respectively. MRSA bacteraemia rates for these specialties are proportionally lower due to the higher number of admissions in these specialties (11).

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[Consultation Document](#)

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2) Healthcare Commission

*The Annual Health Check 2007/08: a national overview of the performance of NHS trusts in England*

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3) Healthcare Commission correspondence

March 11 2009

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6) Health Protection Agency Notification

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7) Health Protection Agency

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10) The European Antimicrobial Resistance Surveillance System (EARSS)

[Annual Report 2007](#)

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EARSS Management Team, members of the Advisory Board, and national representatives of EARSS

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11) Health Protection Agency

[Surveillance of Healthcare Associated Infections Report: 2008](#)

Health Protection Agency

July 2008

### **Latest infection control update from Dr Foster**

Infection control staff work to avoid infection spreading at a hospital. They provide guidelines that should be followed by other medical staff and patients alike.

Infection control measures include hand-washing, using alcohol hand rub on entering and leaving wards, using gloves and aprons, using and disposing of needles safely and educating staff, patients and carers about infection.

Dr Foster Health's questionnaire, of which infection control is a part, is sent out to all NHS trusts in England and Wales on a yearly basis (financial year is April 1 to March 31).

#### **INFO BOX:**

##### **What is a Strategic Health Authority (SHA)?**

SHAs manage the local NHS on behalf of the Secretary of State and are responsible for:

- making sure local health services are of a high quality and are performing well
- developing plans for improving health services in their local area
- increasing the capacity of local health services - so they can provide more services
- making sure national priorities - for example, programmes for improving cancer services - are integrated into local health service plans

Strategic health authorities manage the NHS locally and are a key link between the Department of Health (DoH) and the NHS.

##### **What is an NHS trust?**

An NHS trust may comprise one hospital or several hospitals, plus a variety of other locations where clinics might be held. NHS trusts are accountable to Strategic Health Authorities, though they retain their operational responsibility for secondary care hospitals.

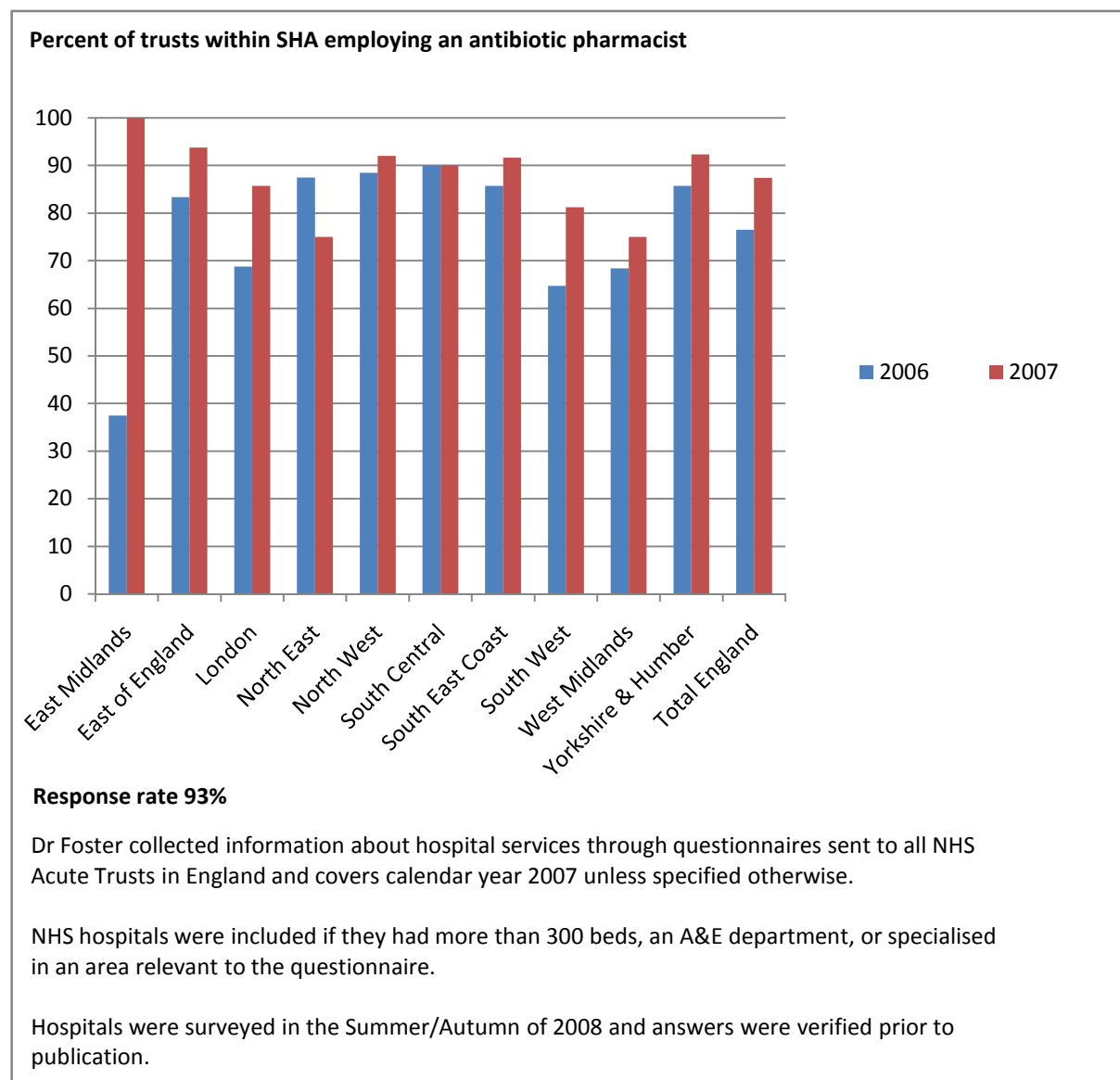
##### **What is a Primary Care trust?**

Primary Care Trusts (PCTs) are the lead NHS organisations in assessing need, planning and securing all health services and improving health locally. They provide and develop primary care services, such as GPs and dentists. PCTs are generally not responsible for delivery of hospital services.

For the financial year April 1 2007 to March 31 2008, the following six questions related to infection control were asked of Strategic Health Authority trusts:

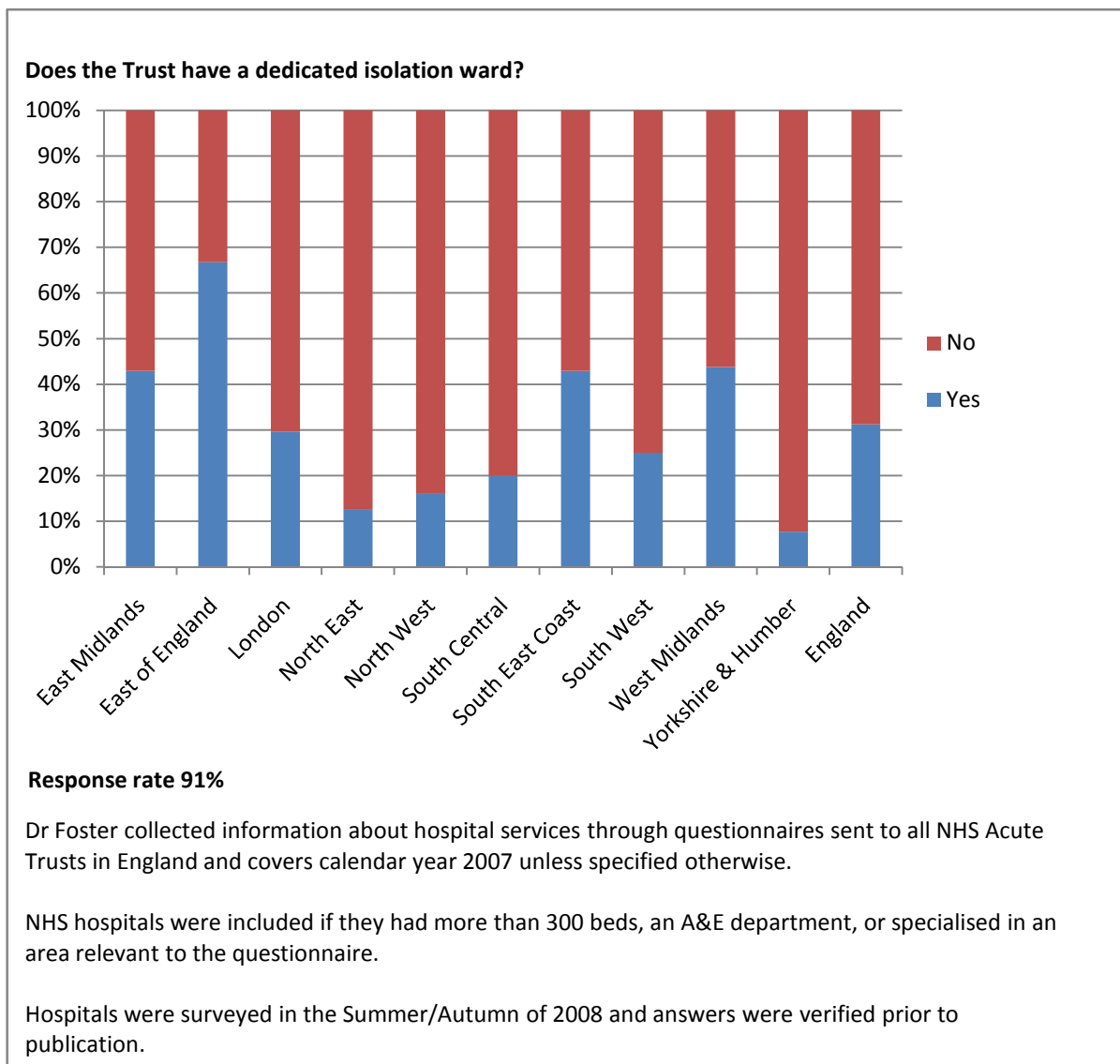
**1) Does the NHS trust employ an antibiotic pharmacist?**

An antibiotic pharmacist advises hospital staff on how they can prescribe antibiotics in a way that will reduce the chances of bacterial resistance to antibiotics. Antibiotic pharmacists will ensure that correct dosages of antibiotics are given and that the choice and length of time the drug should be taken are consistent with the hospital antibiotic policy.



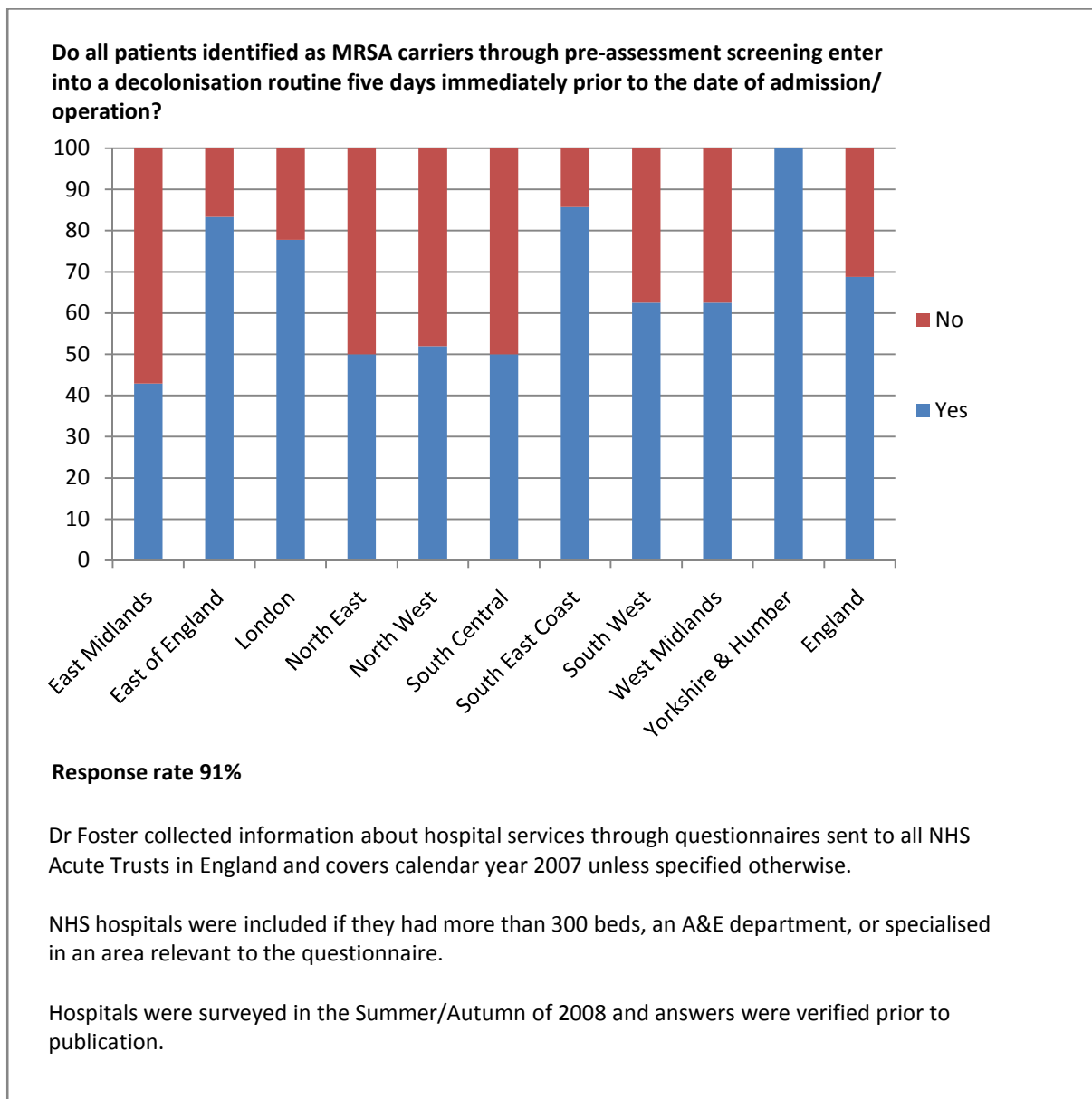
## 2) Does the trust have a dedicated isolation ward?

This question is asked because patients suspected of, or diagnosed with, infection or colonisation by the bacteria, [Clostridium difficile](#), [MRSA](#), or other potentially dangerous infectious diseases such as tuberculosis, should be separated from uninfected patients to avoid cross-infection.



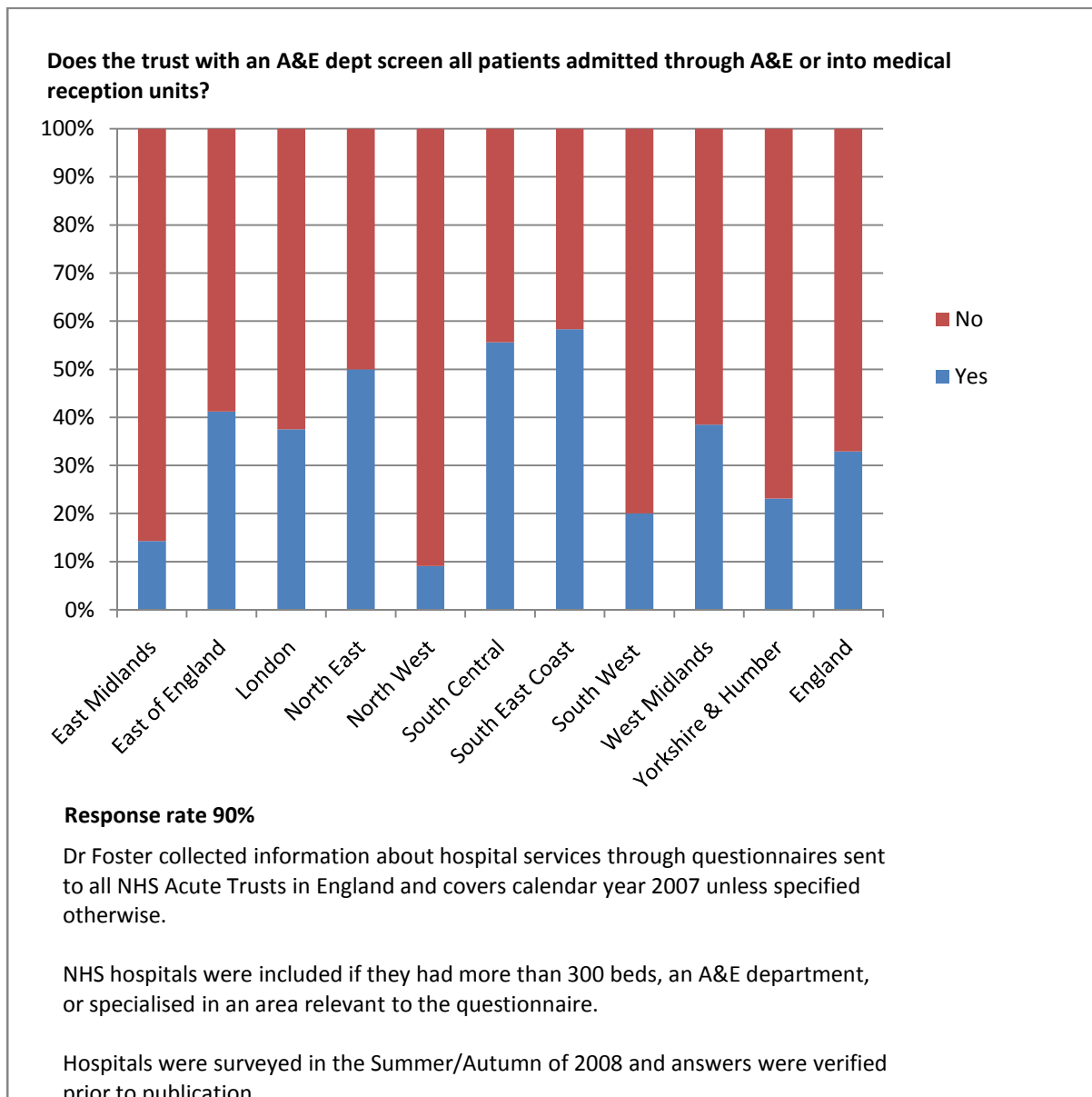
### 3) Do all patients identified as MRSA carriers through pre-assessment screening enter into a decolonisation routine five days immediately prior to the date of admission/ operation?

This question is asked because if NHS trust hospitals in a Strategic Health Authority identify a patient as an MRSA carrier or “colonised” (someone who has the MRSA bacteria in their nose or on their skin), it will ask the patients to use the following decolonisation methods before they can have treatment at the hospital: antibacterial shampoo and body wash; or antibacterial nasal cream.



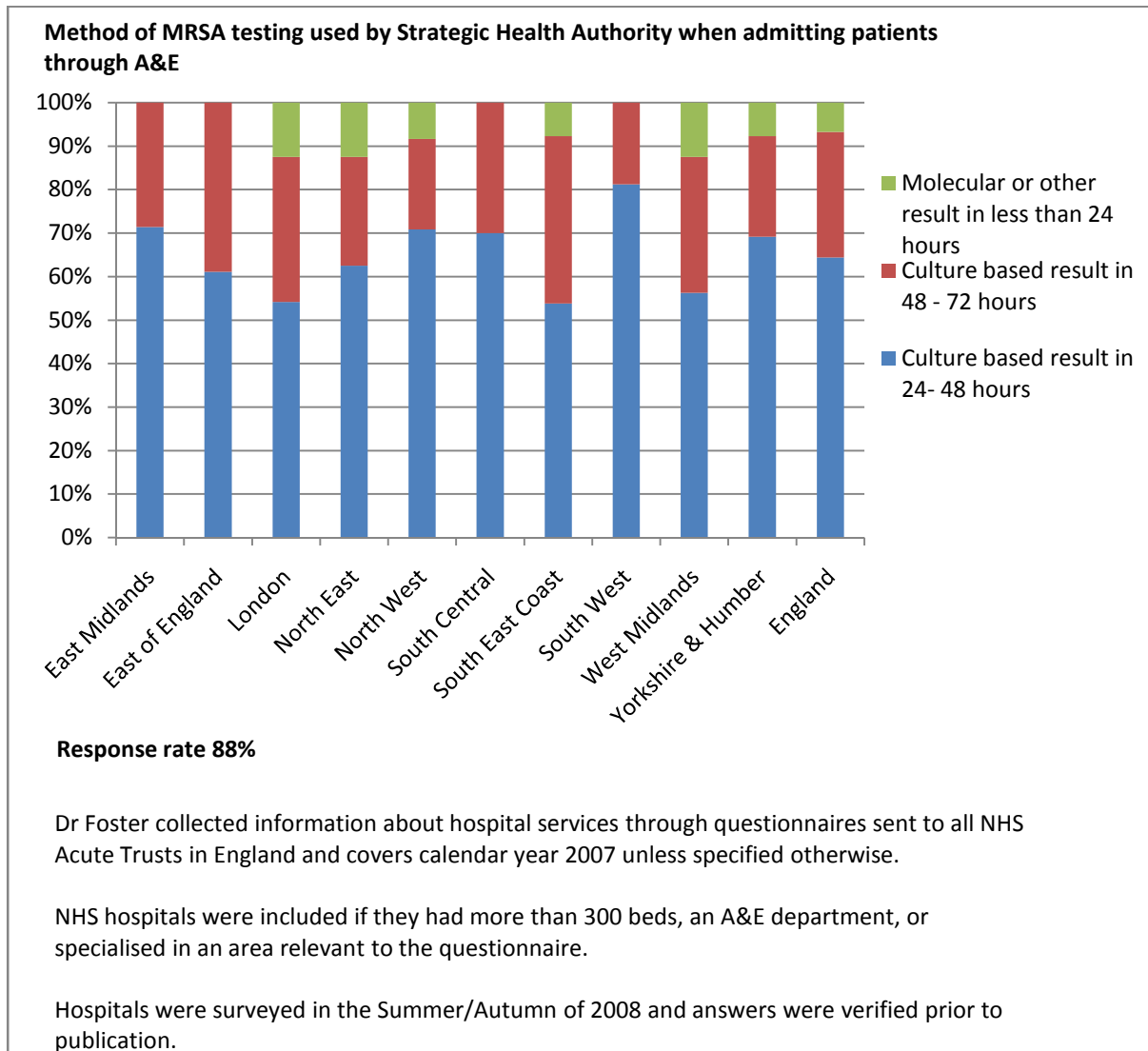
#### 4) Does the trust with an A&E department screen all patients admitted through A&E or into medical reception units?

This question is asked to see if NHS trusts with A&E departments in Strategic Health Authorities screen all patients admitted as accidents or emergencies for MRSA and other potentially infectious bacteria before they are operated on or put on wards with other patients.



## 5) What method of MRSA screening do you use when admitting patients through A&E?

This question is asked to see what method of MRSA screening is used by NHS trusts within Strategic Health Authorities to test accident and emergency (A&E) patients. Usually, a hospital will have a single method for screening. A few hospitals will use a slower screening method for non-emergency cases.



## 6) Are all patient groups (surgical and medical) screened for MRSA at pre-admission assessment clinics?

This question is asked to assess if trusts in Strategic Health Authorities screen all patients for MRSA at pre-admission assessment clinics. Screening for bacteria at this stage can stop a patient infected or colonised with MRSA from bringing the bacteria into the hospital wards and risking the health of other patients. If MRSA is detected then the patient will undergo a decolonisation routine.

