

## Voluntary surveillance of *Clostridium difficile* in England, Wales and Northern Ireland, 2006

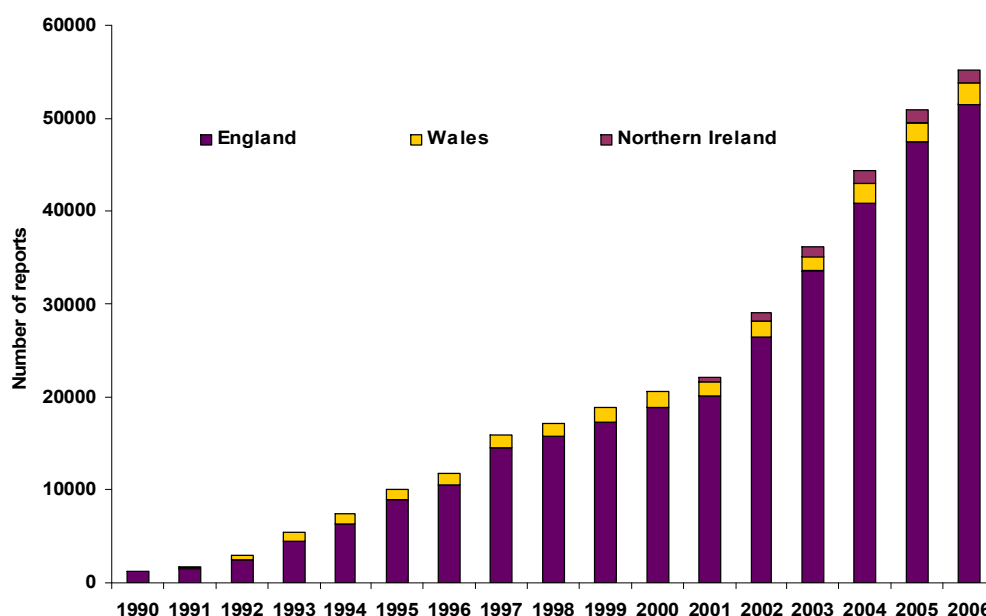
This report covers voluntary reports of *Clostridium difficile* positive faecal samples made to the HPA in 2006 from laboratories in England, Wales, and Northern Ireland. Age specific rates of *C. difficile* were calculated using Office of National Statistics 2005 mid-year resident population estimates as denominators. Data were analysed and displayed according to current regional boundaries

### Trend in total reports of *Clostridium difficile*

Earliest specimen year	England	Wales	Northern Ireland	Total
1990	1172	22	-	1194
1991	1597	70	-	1667
1992	2440	506	-	2946
1993	4462	995	-	5457
1994	6401	1083	-	7484
1995	8929	1141	-	10070
1996	10473	1290	-	11763
1997	14567	1335	-	15902
1998	15774	1400	-	17174
1999	17344	1458	-	18802
2000	18853	1746	-	20599
2001	20121	1600	345	22066
2002	26414	1710	930	29054
2003	33560	1595	1017	36172
2004	40890	2125	1388	44403
2005	47507	1971	1434	50912
2006	51519	2261	1433	55213

In 2006, the HPA received 55,213 reports of positive *C. difficile* laboratory samples, an 8.4% increase on the 50,912 reports received during 2005. The 2006 total comprised 51,519 positive samples from England, 2,261 from Wales and 1,433 from Northern Ireland. This reflected an increase of 8% in England and an increase of 15% in Wales

### Total reports of *Clostridium difficile* isolated from faecal specimens under the voluntary reporting scheme: England, Wales and Northern Ireland\* 1990-2006\*\*

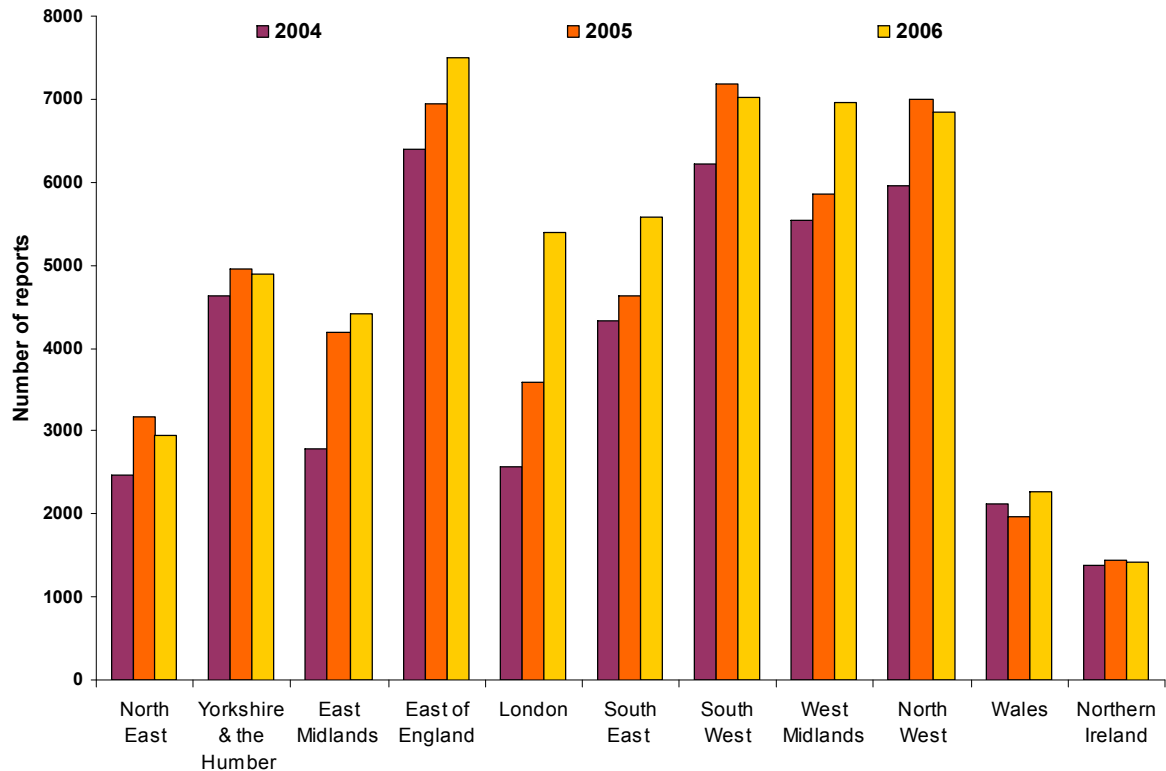


## Laboratory reports received under the voluntary reporting scheme

The rates of *C. difficile* positive laboratory reports for the overall population were 102 per 100,000 population in England, 76 positive samples per 100,000 in Wales and 83 positive samples per 100,000 in N. Ireland.

Since 2005, the population rate has increased from 93 to 102 positive *C. difficile* samples per 100,000 population in England, from 82 to 83 samples per 100,000 in N. Ireland and from 66 to 76 positive samples per 100,000 population in Wales.

## Laboratory reports of *Clostridium difficile*: English health regions, Wales and Northern Ireland 2004 – 2006\*\*



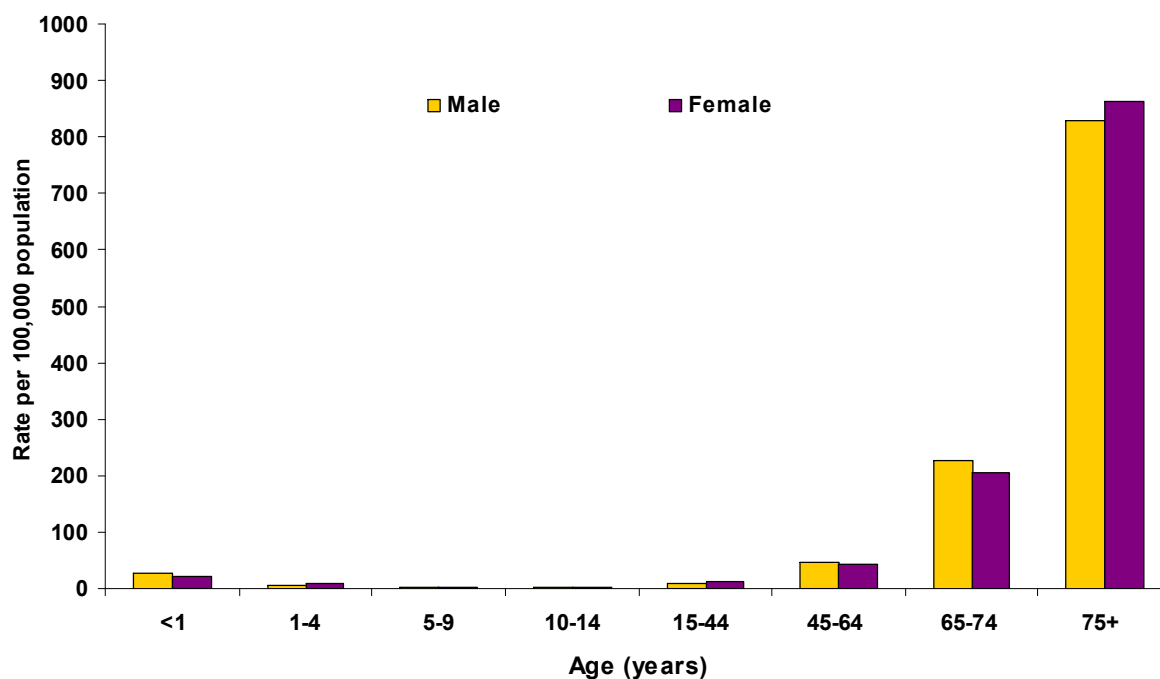
## Age and sex-specific rates<sup>†</sup> of *Clostridium difficile*

Compared to 2005, the number of *C. difficile* reports increased by 12% in males, and 11% in females. Overall, there were 115 *C. difficile* positive laboratory reports per 100,000 population in females, and 84 per 100,000 population in males. In the group with the highest rates (people aged 75 years and over), rates were higher in women compared to men: in the 65-74 year age group, rates were higher in men.

	Male	Female	Sex not specified	Total	Rate per 100,000		
					Male	Female	Total
<1 year	98	70	1	169	28.9	21.7	25.5
1-4 years	65	96	0	161	5.1	7.9	6.4
5-9 years	42	38	1	81	2.5	2.4	2.5
10-14 years	46	46	0	92	2.6	2.7	2.6
15-44 years	1044	1339	6	2389	9.1	11.7	10.4
45-64 years	3053	3016	20	6089	46.1	44.4	45.4
65-74 years	4971	4977	30	9978	227.9	206.4	217.3
75+ years	13382	22475	104	35961	827.5	862.2	851.4
Age not specified	50	117	126	293			
All ages	22751	32174	288	55213	84.2	114.5	100.2

*C. difficile* rates are markedly higher in older age groups: age-specific rates of *C. difficile* reports were 45 per 100,000 population in people aged 45-64, 217 per 100,000 population in people aged 65-74 and 851 per 100,000 population in people aged 75 years and older.

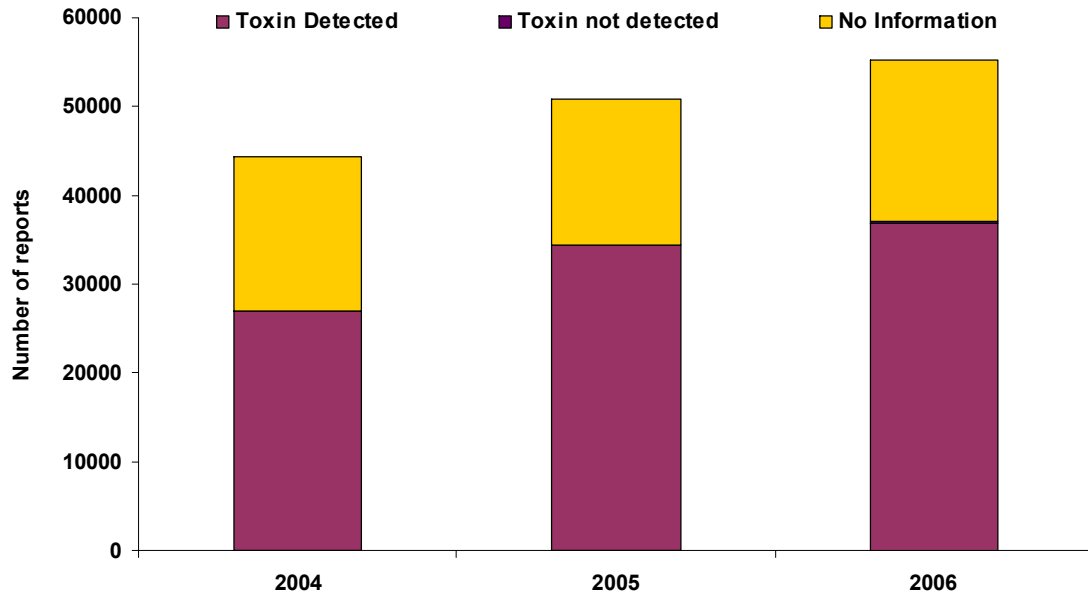
## Age specific rates<sup>†</sup> of *Clostridium difficile* from laboratory reports under voluntary reporting scheme: England, Wales and Northern Ireland 2006\*\*



## Reports of toxin detection in *Clostridium difficile*

In 2005, 67% of reports received by LabBase indicated that toxin had been detected, less than 1% of reports stated that toxin had not been detected, and 33% did not contain any information on toxin detection. This confirms ongoing increases in the proportion of reports indicating toxin detection.

### Reports of toxin detection in *Clostridium difficile*: England, Wales and Northern Ireland 2004-2006\*\*

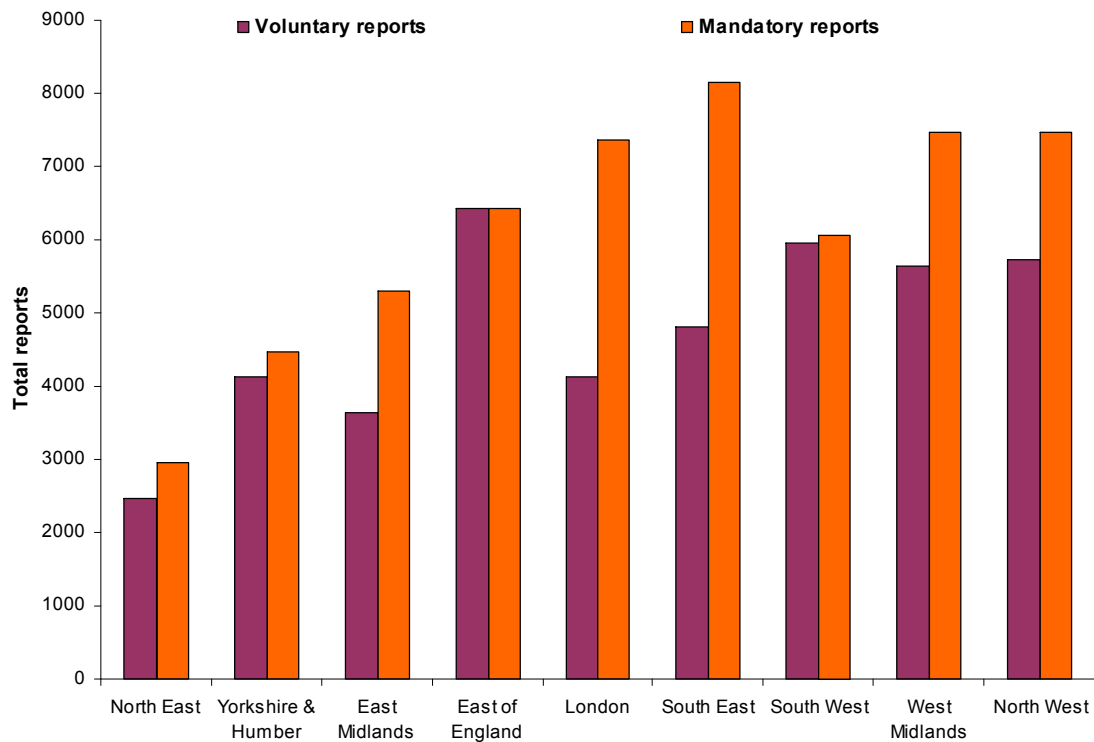


## Ascertainment of *Clostridium difficile* data for the mandatory and voluntary reporting schemes

Since 2004, regional differences in ascertainment have been appraised by comparing numbers of laboratory reports under the voluntary and mandatory systems for people aged 65 years and over in each English region.

The number of cases reported through voluntary surveillance in London and the South East is fewer than 60% of cases reported through mandatory surveillance. The variation is much smaller in the other English health regions; ascertainment of voluntary reports is greatest in the East of England region.

## Ascertainment of *Clostridium difficile* data for the mandatory and voluntary reporting schemes in England for patients aged 65 years and over in 2006\*\*



\*Northern Ireland reports included from 2001 only

\*\*Data from 2006 are provisional

†Rates are calculated using 2005 mid-year population estimates