

Commentary for Final Monthly Report for 2012/13 financial year

Clostridium difficile

- This report presents data on numbers of *C. difficile* in Wales in the 2012/13 financial year.
- Data is mainly collected via Datastore, a data warehouse system used by all microbiology laboratories in Wales. This data is supplemented manually with *C. difficile* specimens from patients in Powys Health Board where the laboratory used for processing the specimen is in England.
- Data is extracted for the surveillance scheme using the following criteria:
 - The patient is at least 2 years old
 - The sample was not taken from a patient in a private hospital, a privately run dialysis unit or post-mortem
 - The sample had a positive laboratory *C. difficile* test:
 - Either by a single test (toxin A and B enzyme immunoassay or a neutralised cell toxicity assay) protocol.
 - Or a two-stage testing protocol, (positive glutamate dehydrogenase (GDH) assay combined with a positive *C. difficile* toxin enzyme immunoassay). All laboratories in Wales have now moved to a two-stage testing protocol for *C. difficile*; the month of change is provided in Table 1.
 - Multiple positive samples from the same patient within a 28 day period are excluded as duplicates
- A total of 1934 cases of *C. difficile* were identified in Wales in the 2012/13 financial year. This is a reduction of 10% compared to the 2011/12 financial year (2142).
- 71% (1365/1934) of the *C. difficile* cases were identified from patients in inpatient wards in hospitals in Wales. The other cases were from non-inpatient wards in hospitals (eg A&E, Admission Units, Outpatients) and from community locations. There was a 14% reduction in the numbers of cases from inpatient locations in 2012/13 compared to 2011/12 (1586).
- In the 2012/13 financial year, 80% (1094/1365) of the cases from inpatient wards were aged greater than 65 years. This compares to 82% (1295/1586) of cases in the 2011/12 financial year.
- Within the cases from inpatients aged greater than 65 years, there has been a 16% reduction in cases in Wales compared to 2011/12 and a 60% reduction compared to the original baseline year when targets were introduced (Jul 08 – Jun 09).
- All Health Boards in Wales had fewer cases of *C. difficile* in inpatients aged greater than 65 in 2012/13 compared to 2011/12, other than Powys Health Board where data was collected differently between the 2 periods.
- The tier 1 target for Health Boards and Trusts in Wales for 2012/13 was a minimum 20% reduction against 2011/12 *C. difficile* figures in those aged greater than 65 years. The six large Health Boards achieved a range of reductions from 2% to 31%. All Health Boards (other than Powys) have experienced at least a 50% reduction in cases in *C. difficile* since the baseline year of 2008/9, but it has become more challenging for some organisations to reduce further this year.
- It should be noted that the change in testing protocol may influence the numbers of *C. difficile* identified.

- Information regarding rates of *C. difficile* in Wales for the 2012/13 financial year will be issued in July 2013.

Table 1. Month of Change to Two-Stage Testing for *C. difficile* by laboratory in Wales

Health Board	Laboratory	Move to Dual Test
ABMU	Public Health Wales Microbiology Swansea	Prior to April 2012
Aneurin Bevan	Nevill Hall Hospital	May 2012
	Royal Gwent Hospital	May 2012
Betsi Cadwaladr	Public Health Wales Microbiology Bangor	April 2012
	Public Health Wales Microbiology Rhyl	April 2012
	Wrexham Maelor Hospital	September 2012
Cardiff & Vale	Public Health Wales Microbiology Cardiff	April 2012
Cwm Taf	Prince Charles Hospital	May 2012
	Royal Glamorgan Hospital	May 2012
Hywel Dda	Public Health Wales Microbiology Carmarthen	April 2012
	Withybush Hospital	Prior to April 2012
Powys	Testing carried out via Public Health Wales Microbiology, Royal Gwent Hospital and English laboratories	
Velindre NHS Trust	Testing carried out at Public Health Wales Microbiology Cardiff	

***Staphylococcus aureus* bacteraemia**

- This report presents data on numbers of *S. aureus* from blood cultures (bacteraemia) in Wales in the 2012/13 financial year.
- Data is mainly collected via Datastore, a data warehouse system used by all microbiology laboratories in Wales. This data is supplemented manually with *S. aureus* bacteraemia specimens from patients in Powys Health Board where the laboratory used for processing the specimen is in England.
- Data is extracted for the surveillance scheme using the following criteria:
 - *S. aureus* was identified from a blood culture sample
 - The sample was not taken from a patient in a private hospital, a privately run dialysis unit or post-mortem
 - Multiple positive samples from the same patient within a 14 day period are excluded as duplicates
- 889 blood cultures positive for *S. aureus* were identified in Wales during the 2012/13 financial year. This represents an increase of 5% compared to the numbers from the 2011/12 financial year (850).
- 18% (161/889) of the *S. aureus* blood cultures were resistant to meticillin (MRSA). This compares to 23.4% (199/850) of total *S. aureus* blood cultures in 2011/12 and 28.6% (274/958) in the original baseline year for targets (2009/10 financial year).
- Numbers of MRSA blood cultures in Wales have decreased by 19% compared to the last financial year (161 vs 199), and by 41% compared to 2009/10 (274).
- The tier 1 target for Health Boards and Trusts in Wales for 2012/13 was a minimum 20% reduction against 2011/12 figures for MRSA and MSSA bacteraemia. Five of the six large Health Boards have experienced a reduction in the numbers of MRSA blood cultures compared to 2011/12, ranging from 15% to 44%. 1 Health Board saw an increase of 19%. All Health Boards have reduced their MRSA bacteraemia numbers since the baseline year of 2008/9 – reduction range 9% - 60%.
- Numbers of meticillin sensitive (MSSA) blood cultures in Wales have increased by 12% compared to the last financial year (728 vs 651), and by 6% compared to 2009/10 (684).
- Five of the six large Health Boards have experienced an increase in the numbers of MSSA blood cultures compared to 2011/12, ranging from 5% to 42%. 1 Health Board has managed to reduce by 5%
- Information regarding rates of *S. aureus* bacteraemia in Wales for the 2012/13 financial year will be issued in September 2013.