

***Staphylococcus aureus* Blood Stream Infection (Bacteraemia)**  
**Surveillance**

**Aneurin Bevan Health Board Data per 100,000 Bed Days**

## Rates of *Staphylococcus aureus* Blood Stream Infections per 100,000 bed days

For the *Staphylococcus aureus* blood stream infection (bacteraemia) surveillance scheme, rates produced for reports have historically used 1,000 bed days as the standard comparison denominator. However, the Top Ten Blood Stream Infection (bacteraemia) surveillance uses 100 000 bed days as the standard comparison denominator. To allow comparisons between the two schemes, the *S. aureus* data published for each Health Board has been recalculated to be per 100,000 bed days. However to allow comparison with the English scheme, is presented per 10,000 bed days please divide these Welsh Health Board figures by 10.

### Aneurin Bevan Health Board Annual Data: 01/04/12 – 31/03/13

Blood Culture Sets Taken (BCS)	Positive Blood Cultures (PBS)*	Total <i>S.aureus</i>	MRSA	Bed days	% of BCS that are MRSA	% of PBS that are MRSA	% of <i>S.aureus</i> that are MRSA	BCS/100,000 bed days	PBS/100,000 bed days	Total <i>S.aureus</i> /100,000 bed days	MRSA/100,000 bed days
13742	1916	136	23	598355	0.17	1.20	16.91	2297	320	23	4

\*Including duplicates and contaminants

## Aneurin Bevan Health Board Quarterly Trend Data: 01/04/01 – 31/03/13

Quarter	Quarter no	MRSA	MSSA	Total <i>S. aureus</i>	Bed days	MRSA/100,000 bed days	MSSA/100,000 bed days	SA/100,000 bed days
Apr 01 - Jun 01	1	10	17	27	172840	6	10	16
Jul 01 - Sep 01	2	13	18	31	174135	7	10	18
Oct 01 - Dec 01	3	18	21	39	175020	10	12	22
Jan 02 - Mar 02	4	14	21	35	181134	8	12	19
Apr 02 - Jun 02	5	20	12	32	180043	11	7	18
Jul 02 - Sep 02	6	14	24	38	179572	8	13	21
Oct 02 - Dec 02	7	19	20	39	181923	10	11	21
Jan 03 - Mar 03	8	15	24	39	186211	8	13	21
Apr 03 - Jun 03	9	14	20	34	181375	8	11	19
Jul 03 - Sep 03	10	9	16	25	178434	5	9	14
Oct 03 - Dec 03	11	18	23	41	180696	10	13	23
Jan 04 - Mar 04	12	20	24	44	188110	11	13	23
Apr 04 - Jun 04	13	14	14	28	180300	8	8	16
Jul 04 - Sep 04	14	10	23	33	176979	6	13	19
Oct 04 - Dec 04	15	13	35	48	172845	8	20	28
Jan 05 - Mar 05	16	20	21	41	182755	11	11	22
Apr 05 - Jun 05	17	6	24	30	174314	3	14	17
Jul 05 - Sep 05	18	7	29	36	167522	4	17	21
Oct 05 - Dec 05	19	12	23	35	171435	7	13	20
Jan 06 - Mar 06	20	4	20	24	175597	2	11	14
Apr 06 - Jun 06	21	11	33	44	171775	6	19	26
Jul 06 - Sep 06	22	6	25	31	165513	4	15	19
Oct 06 - Dec 06	23	9	24	33	166813	5	14	20
Jan 07 - Mar 07	24	6	19	25	162617	4	12	15
Apr 07 - Jun 07	25	7	21	28	168325	4	12	17
Jul 07 - Sep 07	26	17	27	44	161386	11	17	27
Oct 07 - Dec 07	27	22	29	51	161955	14	18	31
Jan 08 - Mar 08	28	16	16	32	165338	10	10	19
Apr 08 - Jun 08	29	19	34	53	165562	11	21	32
Jul 08 - Sep 08	30	15	32	47	157339	10	20	30
Oct 08 - Dec 08	31	8	27	35	158304	5	17	22
Jan 09 - Mar 09	32	11	21	32	159948	7	13	20
Apr 09 - Jun 09	33	7	28	35	149165	5	19	23
Jul 09 - Sep 09	34	8	28	36	146607	5	19	25

## Aneurin Bevan Health Board Quarterly Trend Data: 01/04/01 – 31/03/13 cont...

Quarter	Quarter no	MRSA	MSSA	Total <i>S. aureus</i>	Bed days	MRSA/100,000 bed days	MSSA/100,000 bed days	SA/100,000 bed days
Oct 09 - Dec 09	35	8	25	33	147792	5	17	22
Jan 10 - Mar 10	36	8	35	43	153764	5	23	28
Apr 10 - Jun 10	37	7	31	38	149774	5	21	25
Jul 10 - Sep 10	38	4	31	35	146116	3	21	24
Oct 10 - Dec 10	39	3	25	28	142668	2	18	20
Jan 11 - Mar 11	40	8	27	35	149214	5	18	23
Apr 11 - Jun 11	41	6	29	35	144411	4	20	24
Jul 11 - Sep 11	42	3	16	19	139785	2	11	14
Oct 11 - Dec 11	43	11	26	37	143132	8	18	26
Jan 12 - Mar 12	44	7	37	44	158239	4	23	28
Apr 12 - Jun 12	45	10	26	36	145392	7	18	25
Jul 12 - Sep 12	46	2	28	30	145318	1	19	21
Oct 12 - Dec 12	47	7	33	40	149406	5	22	27
Jan 12 - Mar 13*	48	4	26	30	158239	3	16	19

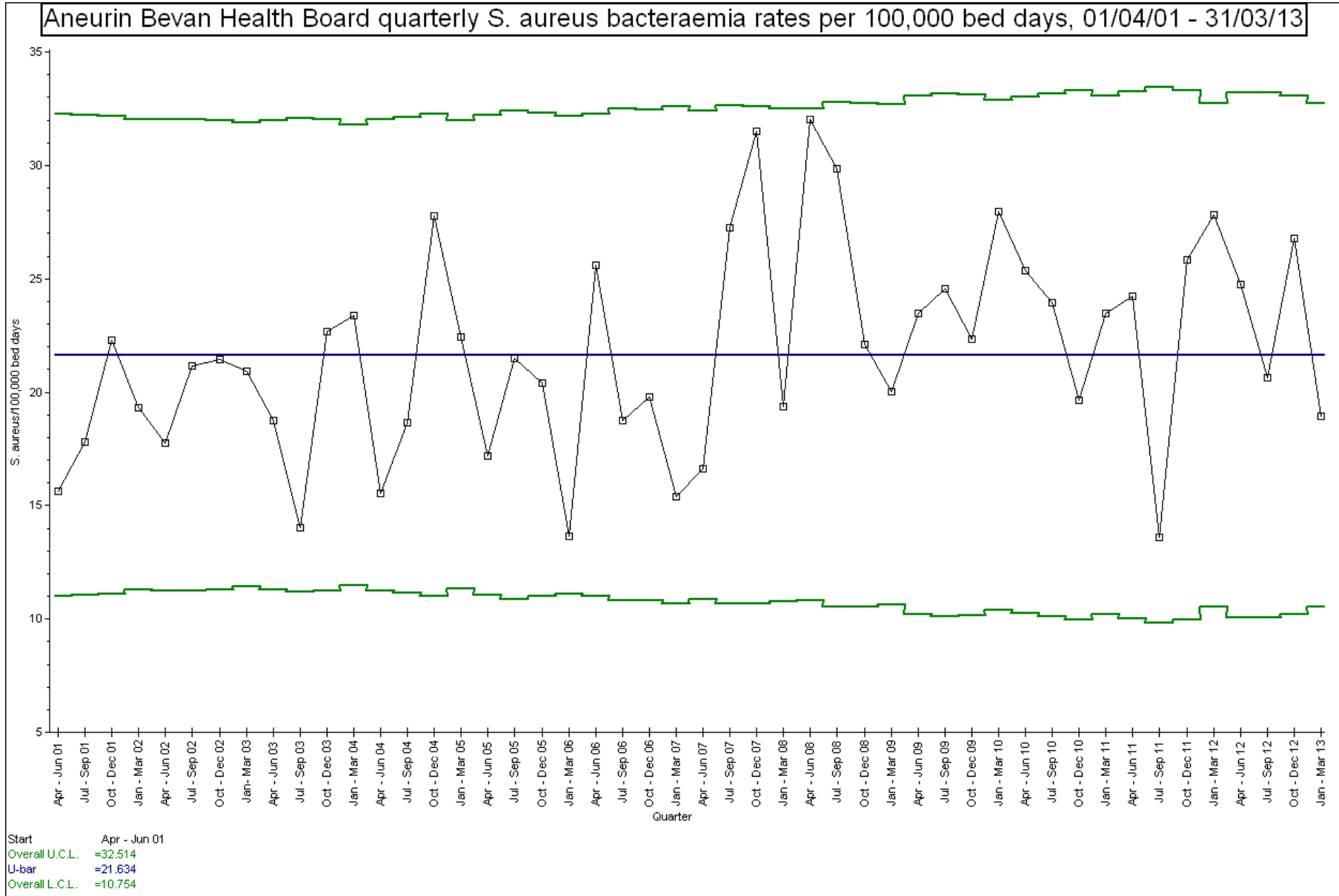
\*Jan-Mar 2012 bed days used as a proxy for Jan-Mar 2013

## **Aneurin Bevan Health Board Statistical Process Control Charts for Rates of *S. aureus* Blood Stream Infections per 100,000 Bed Days**

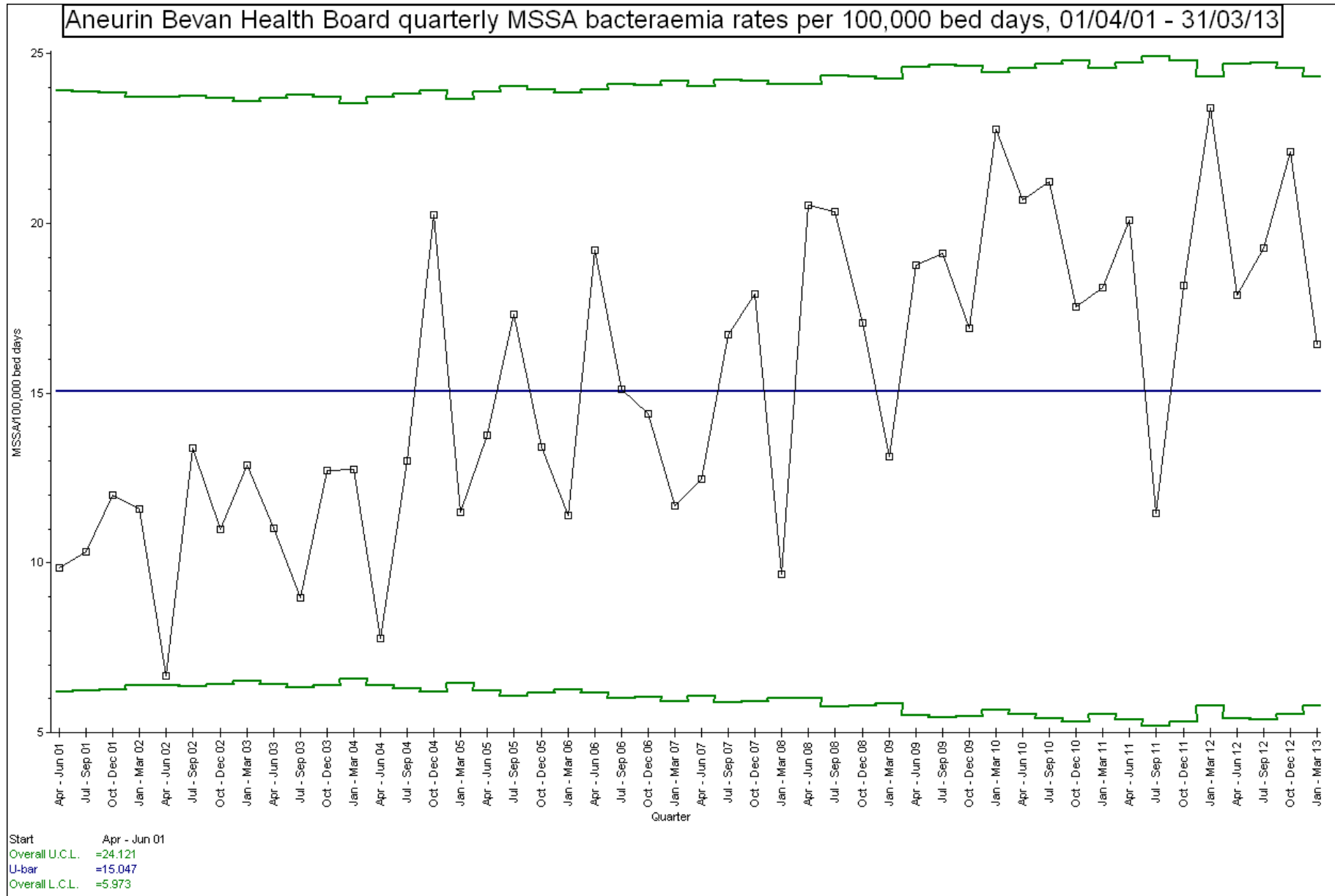
Data from the *Staphylococcus aureus* blood stream infection (bacteraemia) surveillance are used to produce statistical process control (SPC) charts. These compare a Health Board's rate of infection with calculated upper and lower control limits, which allow natural variation in rates to be distinguished from situations where something unusual is occurring. SPC charts are used to compare rates within a Health Board over time and between equivalent Health Boards at a given point in time. Health Boards are asked to investigate if their rates fall outside the control limits of the SPC charts. More information about the statistical analyses performed on the *S. aureus* data and what the results mean is provided in the section on the *S. aureus* Blood Stream Infections surveillance scheme.

The reductions in MRSA in Wales have resulted in the control limits being recalculated for the SPC charts. New control limits have been provided for individual Health Boards where appropriate. Because of the recalculated control limits it is no longer possible to provide the 1 and 2 SD lines on the control charts.

# SPC Chart for Quarterly *S. aureus* Blood Stream (Bacteraemia) Rates: 01/04/01 – 31/03/13



# SPC Chart for Quarterly MSSA Blood Stream (Bacteraemia) Rates: 01/04/01 – 31/03/13



# SPC Chart for Quarterly MRSA Blood Stream (Bacteraemia) Rates: 01/04/01 – 31/03/13

