

National Hospital Acquired Infection *Staphylococcus aureus* bacteraemia definition

Patient-episode of *S. aureus* bacteraemia (SAB):

A patient-episode of bacteraemia is defined as a positive blood culture for *Staphylococcus aureus*. For surveillance purposes, only the first isolate per patient is counted, unless at least 14 days has passed without a positive blood culture, after which an additional episode is recorded.

A *Staphylococcus aureus* bacteraemia (SAB) will be considered to be healthcare-associated if:

- the patient's first SAB blood culture was collected more than 48 hours after hospital admission or less than 48 hours after discharge

OR

- the patient's first SAB blood culture was collected less than or equal to 48 hours after hospital admission and one or more of the following key clinical criteria was met for the patient-episode of SAB.

Clinical criteria:

- SAB is a complication of the presence of an indwelling medical device (e.g. Intravascular line, haemodialysis vascular access, CSF shunt, urinary catheter)
- SAB occurs within 30 days of a surgical procedure where the SAB is related to the surgical site
- SAB was diagnosed within 48 hours of a related invasive instrumentation or incision
- SAB is associated with neutropenia (Neutrophils: $<1 \times 10^9/L$) contributed to by cytotoxic therapy

Exclusions

Cases where a known previous positive test has been obtained within the last 14 days are excluded. For example: If a patient has SAB in which 4 sets of blood cultures are positive over the initial 3 days of the patient's admission only one episode of SAB is recorded. If the same patient had a further set of positive blood cultures on day 5 of the same admission, these would not be counted again, but would be considered part of the initial patient-episode. If the same patient had a further positive blood culture 20 days after admission (i.e. greater than 14 days after their last positive on day 5), then this would be considered a second patient-episode of SAB.

Contamination

A contaminated specimen can produce a false positive in surveillance systems. Contamination of blood cultures is rare in adults (1- 2% of culture positive episodes) and more common in children (5-10%).

If, in the evaluation of a potential event: the clinical picture is unresponsive to infection; repeat blood culture(s) is (are) negative; and no antimicrobial treatment is given, the positive blood culture should be regarded as a contamination and not reported in the surveillance data.



“Hand Hygiene Before and After Every Patient Contact”

