Surveillance of healthcare associated infection: Staphylococcus aureus bacteraemia NBPDS

Exported from METEOR

(AIHW's Metadata Online Registry)

© Australian Institute of Health and Welfare 2024

This product, excluding the AIHW logo, Commonwealth Coat of Arms and any material owned by a third party or protected by a trademark, has been released under a Creative Commons BY 4.0 (CC BY 4.0) licence. Excluded material owned by third parties may include, for example, design and layout, images obtained under licence from third parties and signatures. We have made all reasonable efforts to identify and label material owned by third parties.

You may distribute, remix and build on this website’s material but must attribute the AIHW as the copyright holder, in line with our attribution policy. The full terms and conditions of this licence are available at https://creativecommons.org/licenses/by/4.0/.

Enquiries relating to copyright should be addressed to info@aihw.gov.au.

Enquiries or comments on the METEOR metadata or download should be directed to the METEOR team at meteor@aihw.gov.au.

# Surveillance of healthcare associated infection: Staphylococcus aureus bacteraemia NBPDS

|  |
| --- |
| Identifying and definitional attributes |
| Metadata item type: | Data Set Specification |
| METEOR identifier: | 391133 |
| Registration status: | [Health!](https://meteor-uat.aihw.gov.au/RegistrationAuthority/14), Standard 15/11/2012 |
| DSS type: | Data Set Specification (DSS) |
| Scope: | The purpose of this National best practice data set (NBPDS) is to support a comprehensive surveillance program of healthcare associated infections (HAI). HAIs are those infections that are not present or incubating at the time of admission to a healthcare program or facility, develop within a healthcare organisation or are produced by micro-organisms acquired during admission.This NBPDS is intended to support *Staphylococcus aureus* bacteraemia (SAB) surveillance in Australian hospitals. It is designed for the purposes of HAI surveillance, not diagnosis. The value of surveillance as part of a hospital infection control program is supported by high-grade international and national evidence.This NBPDS supports development of local forms and systems for surveillance of HAIs and associated data collection. This NBPDS applies to patient episodes of SAB in Australian hospitals.**Case Definition – Healthcare associated *Staphylococcus aureus* bacteraemia (SAB)**A patient-episode of *Staphylococcus aureus* bacteraemia (SAB) is 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 culture, after which an additional episode is recorded.A SAB will be considered to be a healthcare-associated event if:EITHER* CRITERION A. The patient’s first SAB positive blood culture was collected more than 48 hours after hospital admission or less than 48 hours after discharge.

OR* CRITERION B. The patient’s first positive 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:
1. SAB is a complication of the presence of an indwelling medical device (e.g. intravascular line, haemodialysis vascular access, CSF shunt, urinary catheter)
2. SAB occurs within 30 days of a surgical procedure where the SAB is related to the surgical site
3. SAB was diagnosed within 48 hours of a related invasive instrumentation or incision
4. SAB is associated with neutropenia (Neutrophils: less than 1 x 109/L) contributed to by cytotoxic therapy

In order for jurisdictions and private hospital ownership groups to accurately report and monitor Healthcare Associated Infections, the data elements listed should be collected at hospital level for each patient-episode of *Staphylococcus aureus* bacteraemia. HAI patient episode data elements for SAB, by short name

|  |  |
| --- | --- |
|  **Data elements to be collected for each patient episode** | **Data elements used for calculation of SAB rates** |
| Person identifier | Patient days |
| Family name | Patient episodes of healthcare associated SAB |
| Given name(s) |   |
| Indigenous status |   |
| Date of birth |   |
| Sex |   |
| Address line (person) |   |
| Suburb/town/locality name (person) |   |
| Australian state/territory identifier |   |
| Australian postcode (address) |   |
| Admission date |   |
| Separation date |   |
| Ward/clinical area |   |
| Specimen collection date |   |
| Specimen collection time |   |
| Laboratory number |   |
| Specimen identifier |   |
| Laboratory result identifier |   |
| Healthcare associated SAB clinical criteria |   |
| Staphylococcus aureus bacteraemia status |   |
| SAB methicillin susceptibility |   |
| Antibiotic susceptibility (MRSA isolate) |   |
| Antibiotic susceptibility indicator (MRSA isolate) |   |
| Establishment number |   |

 |

|  |
| --- |
| Collection and usage attributes |
| Statistical unit: | Episodes of infection (*Staphylococcus aureus* bacteraemia (SAB)) |
| Guide for use: | Surveillance data should be used to identify local problem areas and implement appropriate policy and clinical interventions to improve the quality of care, not for external benchmarking. Effective surveillance systems provide the impetus for change and make it possible to evaluate the effectiveness of interventions. An effective surveillance system is one that provides timely and reliable information to hospital managers and clinicians to effectively manage HAI. |
| Comments: | Surveillance is an important tool to reduce HAI. The purpose of collecting, analysing, and then acting on reliable surveillance data is to improve quality and patient safety within a service or facility or jurisdiction. |
| Source and reference attributes |
| Submitting organisation: | Australian Commission on Safety and Quality in Health Care (ACSQHC) |
| Origin: | ACSQHC Healthcare Associated Infection Advisory Committee's Technical Working Group |
| Relational attributes |
| Related metadata references: | See also [Healthcare-associated infections NBEDS 2016-2021](https://meteor-uat.aihw.gov.au/content/577789)[Health!](https://meteor-uat.aihw.gov.au/RegistrationAuthority/14), Standard 25/01/2018 |

|  |
| --- |
| Metadata items in this Data Set Specification  |
|

|  |  |  |  |
| --- | --- | --- | --- |
| Seq No. | Metadata item | Obligation | Max occurs |
| 1 | [Person—person identifier, XXXXXX[X(14)]](https://meteor-uat.aihw.gov.au/content/290046) | Optional | 1 |
| 2 | [Person (name)—family name, text X[X(39)]](https://meteor-uat.aihw.gov.au/content/286953) | Optional | 1 |
| 3 | [Person (name)—given name, text X[X(39)]](https://meteor-uat.aihw.gov.au/content/287035) | Optional | 1 |
| 4 | [Person—Indigenous status, code N](https://meteor-uat.aihw.gov.au/content/602543) | Optional | 1 |
| 5 | [Person—date of birth, DDMMYYYY](https://meteor-uat.aihw.gov.au/content/287007) | Optional | 1 |
| 6 | [Person—sex, code N](https://meteor-uat.aihw.gov.au/content/287316) | Optional | 1 |
| 7 | [Person (address)—address line, text X[X(179)]](https://meteor-uat.aihw.gov.au/content/286620) | Optional | 1 |
| 8 | [Address—suburb/town/locality name, text X[X(45)]](https://meteor-uat.aihw.gov.au/content/429889) | Optional | 1 |
| 9 | [Person—Australian state/territory identifier, code N](https://meteor-uat.aihw.gov.au/content/286919) | Optional | 1 |
| 10 | [Address—Australian postcode, Australian postcode code (Postcode datafile) {NNNN}](https://meteor-uat.aihw.gov.au/content/429894) | Optional | 1 |
| 11 | [Episode of admitted patient care—admission date, DDMMYYYY](https://meteor-uat.aihw.gov.au/content/269967) | Optional | 1 |
| 12 | [Episode of admitted patient care—separation date, DDMMYYYY](https://meteor-uat.aihw.gov.au/content/270025) | Optional | 1 |
| 13 | [Establishment—ward/clinical area name, text X[X(39)]](https://meteor-uat.aihw.gov.au/content/389201) | Optional | 1 |
| 14 | [Person—specimen collection date, DDMMYYYY](https://meteor-uat.aihw.gov.au/content/428420) | Optional | 1 |
| 15 | [Person—specimen collection time, hhmm](https://meteor-uat.aihw.gov.au/content/438491) | Optional | 1 |
| 16 | [Laboratory—organisation identifier, text X[X(39)]](https://meteor-uat.aihw.gov.au/content/390779) | Optional | 1 |
| 17 | [Laboratory—specimen identifier, text X[X(39)]](https://meteor-uat.aihw.gov.au/content/428518) | Optional | 1 |
| 18 | [Laboratory—result identifier, text X[X(39)]](https://meteor-uat.aihw.gov.au/content/428639) | Optional | 1 |
| 19 | [Patient episode of Staphylococcus aureus bacteraemia—most probable healthcare associated Staphylococcus aureus bacteraemia clinical criteria, code N](https://meteor-uat.aihw.gov.au/content/388928) | Optional | 1 |
| 20 | [Patient episode of Staphylococcus aureus bacteraemia—Staphylococcus aureus bacteraemia status, code N](https://meteor-uat.aihw.gov.au/content/458219) | Conditional | 1 |
| 21 | [Patient episode of Staphylococcus aureus bacteraemia—Staphylococcus aureus methicillin susceptibility indicator, yes/no code N](https://meteor-uat.aihw.gov.au/content/458522) | Conditional | 1 |
| 22 | [Methicillin-resistant Staphylococcus aureus isolate—antibiotic susceptibility, text X[X(39)]](https://meteor-uat.aihw.gov.au/content/391098)***Conditional obligation:***Required for MRSA isolates only, where the *Staphylococcus aureus* is resistant to methicillin. | Conditional | 8 |
| 23 | [Methicillin-resistant Staphylococcus aureus isolate—antibiotic susceptibility indicator, yes/no code N](https://meteor-uat.aihw.gov.au/content/458628) | Conditional | 8 |
| 24 | [Establishment—number of patient days, total N[N(7)]](https://meteor-uat.aihw.gov.au/content/270045) | Mandatory | 1 |
| 25 | [Establishment—number of patient episodes of healthcare associated Staphylococcus aureus bacteraemia, total episodes N[NNNN]](https://meteor-uat.aihw.gov.au/content/428594) | Mandatory | 1 |
| 26 | [Establishment—organisation identifier (state/territory), NNNNN](https://meteor-uat.aihw.gov.au/content/269975) | Mandatory | 1 |

 |