# Washington State Healthcare-Associated Infection<sup>1</sup> Validation for Acute Care Hospitals

Methicillin-Resistant Staphylococcus Aureus Bacteremia LabID Events, 2021

#### Introduction

According to the Centers for Medicare & Medicaid Services (CMS) and the Washington State <a href="Healthcare-Associated Infection Reporting Statute">Healthcare-Associated Infection Reporting Statute</a>, acute care hospitals must report certain healthcare-associated infections to the Centers for Disease Control's (CDC) National Healthcare Safety Network (NHSN). This data reporting improves patient safety. The Department of Health (DOH) Healthcare-Associated Infections (HAI) Epidemiology team reviews the data and can assist hospitals in reporting.

#### 2021 HAI Validation: MRSA Bacteremia

Methicillin-resistant *Staphylococcus aureus* (MRSA) causes an infection that is resistant to some antibiotics. MRSA can spread through contact with a contaminated wound, from contaminated hands, or by sharing contaminated personal items. It can spread in healthcare facilities and in communities.

MRSA can cause bloodstream infections (bacteremia), sepsis, pneumonia, surgical site infections, and even death among people with certain risk factors, including decreased immunity, advanced age, or chronic health conditions. Hospitals are required to report MRSA bacteremia to CDC NHSN as LabID Events. LabID Events are reports based on laboratory data and admission locations in the hospital.

## Methodology

The HAI Epidemiology team performed the MRSA bacteremia LabID event validation. The team validated data from January through June of calendar year 2021. Twenty acute care hospitals in nine counties participated in the LabID event validation. The team selected hospitals according to the <a href="CDC">CDC</a> 2021 External Validation Guidance and Toolkit. The process included reviewing up to 60 laboratory-confirmed MRSA-positive blood cultures for each hospital using a standardized tool. The team













determined whether the events met reporting criteria and compared the determination with what the hospital reported to NHSN.

The DOH epidemiologist and the hospital Infection Prevention team settled any discrepancies. A discrepancy was defined as a situation where the DOH epidemiologist's and the hospital Infection Preventionist's reporting determinations were different.

Please contact HAI@doh.wa.gov with any questions.

### **Results**

Among the 744 total cases validated, 70% (n=14) of the hospitals had 0 discrepancies. Of those facilities with discrepancies, most had fewer than 10% discrepancies among all cases; there were 16 (0.02%) total discrepancies (see Table 1).

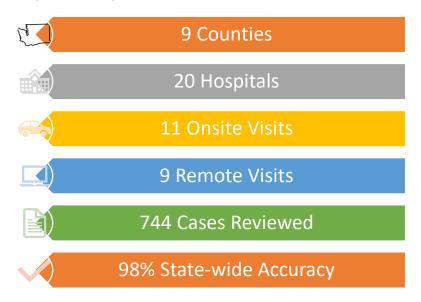
















Table 1: MRSA LABID Event Validation Results

Washington State Department of Health Epidemiologist				
Hospital Infection Prevention Teams		Reportable Event	Non-reportable Event	Total
	Reportable Event	327	0	327
	Non-reportable Event	16	401	417
	Total	343	401	744
Sensitivity			=89%	
Specificity			=100%	
Accuracy (overall)			=98%	

- 1. A healthcare-associated infection: a localized or systemic condition that results from adverse reaction to the presence of an infectious agent or its toxins and that was not present or incubating at the time of admission to the hospital.
- 2. Sensitivity: correct identification of a positive blood culture meeting criteria for reporting
- 3. Specificity: correct identification of a positive blood culture not meeting criteria for reporting



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