



Fifteen Years of Protecting Patients: Oregon's HAI Prevention and Antimicrobial Stewardship Work

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HAI Program Manager



Guess the year



Establishing the Healthcare-Associated Infections Program

- Implement HAI surveillance and prevention
- Maintain a HAI Advisory Committee
- Require healthcare facilities to report infections
- Prepare public reports that summarize incidence of HAIs
- Evaluate quality and accuracy of data collected

HAI Advisory Committee

- Established October 2007
 - Recommended National Healthcare Safety Network (NHSN) as surveillance and reporting mechanism for HAIs
- Ongoing work to advise HAI program surveillance and reporting

2009 reporting

- Central line-associated bloodstream infections
 - Adult intensive care units
- Surgical site infections
 - Coronary artery bypass graft surgery (chest and donor site)
 - Knee prosthesis
- Healthcare worker influenza vaccination rate
- Surgical Care Improvement Project measures

2011 reporting

- Central line-associated bloodstream infections
 - Adult intensive care units
 - Neonatal intensive care units
- Surgical site infections
 - ~~Coronary artery bypass grafting~~
 - Knee prosthesis
 - Colon surgery
 - Hip prosthesis
 - Abdominal hysterectomy
 - Laminectomy
- Healthcare worker influenza vaccination rate
- Surgical Care Improvement Project measures

2012 reporting

- Central line-associated bloodstream infections
 - Adult intensive care units
 - Neonatal intensive care units
- Surgical site infections
 - Knee prosthesis
 - Colon surgery
 - Hip prosthesis
 - Abdominal hysterectomy
 - Laminectomy
- *Clostridioides difficile* laboratory identification event
- Healthcare worker influenza vaccination rate
- Surgical Care Improvement Project measures

2013 reporting

- Central line-associated bloodstream infections (CLABSI)
 - Adult intensive care units
 - Neonatal intensive care units
- Surgical site infections
 - Knee prosthesis
 - Colon surgery
 - Hip prosthesis
 - Abdominal hysterectomy
 - Laminectomy
- *Clostridioides difficile* laboratory identification event
- **Dialysis events**
- Healthcare worker influenza vaccination rate
- Surgical Care Improvement Project measures

2014 reporting

- Central line-associated bloodstream infections (CLABSI)
 - Adult intensive care units
 - Neonatal intensive care units
- Surgical site infections
 - Knee prosthesis
 - Colon surgery
 - Hip prosthesis
 - Abdominal hysterectomy
 - Laminectomy
- *Clostridioides difficile* laboratory identification event
- Methicillin resistant *S. aureus* laboratory identification event
- Dialysis events
- Catheter-associated urinary tract infections (CAUTI)
- Healthcare worker influenza vaccination rate
- Surgical Care Improvement Project measures

HAI Annual Report

OREGON HEALTH AUTHORITY

Healthcare Acquired Infection Reporting Program

Healthcare Acquired Infection Reporting 2009—2010



Photo: Hand washing is one of the most effective ways to prevent the spread of infection. (Centers for Disease Control and Prevention)

This research brief provides updates on three HAI targets in the state:

- ◆ Central Line Associated Bloodstream Infections (CLABSIs) are primary bloodstream infections that are associated with the presence of a central line or a tube that is placed into a patient's large vein, usually in the neck, chest, arm or groin.
- ◆ Surgical Site Infections (SSIs) are infections that are directly related to an operative procedure. The procedures reported in this update are coronary artery bypass graft and knee prosthesis (replacement).
 - Coronary artery bypass graft (CABG) surgery is a treatment for heart disease in which a vein or artery from another part of the body is used to create an alternate path for blood to flow to the heart, bypassing a blocked artery.
 - Knee prosthesis (KPRO) procedures include replacement procedures, replacement of all or part of the knee joint with an artificial device, and

Background

A healthcare acquired infection (HAI) is an infection that occurs during or after treatment for a separate medical condition. Nearly one in every 20 hospitalized patients in the United States each year acquires an HAI.¹ In the

Oregon Public Health

>> Health Care-Associated Infections: 2014 Oregon Annual Report for Providers



2014

Oregon
Health
Authority



HOSPITAL HEALTHCARE-ASSOCIATED INFECTIONS DATA DASHBOARD

- ✉ Submit Facility Comments
- ☰ View Facility Comments
- 📄 Download the Data
- 📄 Download PDF
- 🌐 Visit the OHA HAI Website

Annual data updated on 12/1/2025

Overview Trends CLABSI CAUTI MRSA BSI CDI SSI Antibiotic Stewardship Appendix

HEALTHCARE-ASSOCIATED INFECTIONS SUMMARY FOR HOSPITALS, 2024

Health care-associated infections (HAIs) can have devastating consequences for patients.

The summary below shows how many HAIs were observed in Oregon acute care and critical access hospitals and how 2024 data compares to 1) 2015 baselines (using 2015 national data) and 2) 2020 national reduction targets set by the U.S. Department of Health and Human Services (HHS). As a state, we are working to reduce HAIs and meet national reduction targets.

WHAT IS THE SIR?

The standardized infection ratio (SIR) is a summary measure used to track HAIs at a national, state, or local level over time. The SIR is a risk-adjusted measure that compares the observed number of infections to the predicted number of infections based on the 2015 baseline. The 2015 baseline uses 2015 national HAI aggregate data to calculate the number of predicted infections using variables found to be significant predictors of HAI incidence.

For additional information about the variables used in the SIRs, refer to the SIR guide here: <https://www.cdc.gov/nhsn/pdfs/ps-analysis-resources/nhsn-sir-guide.pdf>

Formula to calculate the SIR:

$$\text{Standardized Infection Ratio (SIR)} = (\text{Observed number of infections}) / (\text{Predicted number of infections})$$

- If the SIR is 1, then the number of actual infections is the same as the number of predicted infections.
- If the SIR is less than 1, then the number of actual infections is less than the number of predicted infections.
- If the SIR is greater than 1, then the number of actual infections is greater than the number of predicted infections.

If the number of predicted infections is less than 1, the numbers are too small to calculate an SIR.

2024 SUMMARY



CENTRAL LINE-ASSOCIATED BLOODSTREAM INFECTIONS (CLABSI)

Acute Care Hospitals		Critical Access Hospitals			See facility-specific CLABSI data
Observed Infections	SIR Interpretation (2015 US Baseline)	Observed Infections	SIR Interpretation (2015 US Baseline)		
90	Statistically fewer infections (green downward triangle)	3	More infections (red upward triangle)		
% Change in SIR from 2023*	-9%	% Change in SIR from 2023*	-12%		

<https://public.tableau.com/app/profile/oregon.public.health.division.acute.and.communicable.disease.pre/viz/HospitalHealthcare-AssociatedInfectionsDataDashboard2024/Overview>

Emerging Infections Program

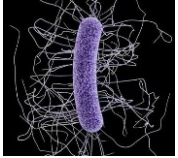


- Established 1995
- Understand risk factors for disease
- Conduct vaccine efficacy studies
- Track success of public health interventions
- Develop new methodologies for improving public health surveillance systems.

Guess the year



Oregon EIP Healthcare Associated Infections-Community Interface Activity (HAIC)



C. difficile



Candidemia (bloodstream yeast infections)



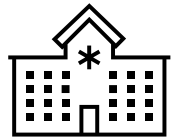
Multisite Gram-negative Surveillance Initiative (MuGSI)



Non-tuberculous Mycobacteria (NTM)



Invasive *E. coli*

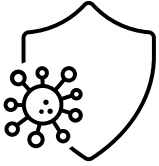


Point prevalence surveys (hospitals and nursing homes)

Guess what year



HAI Program expansion



Infection Prevention and Control



Project Firstline

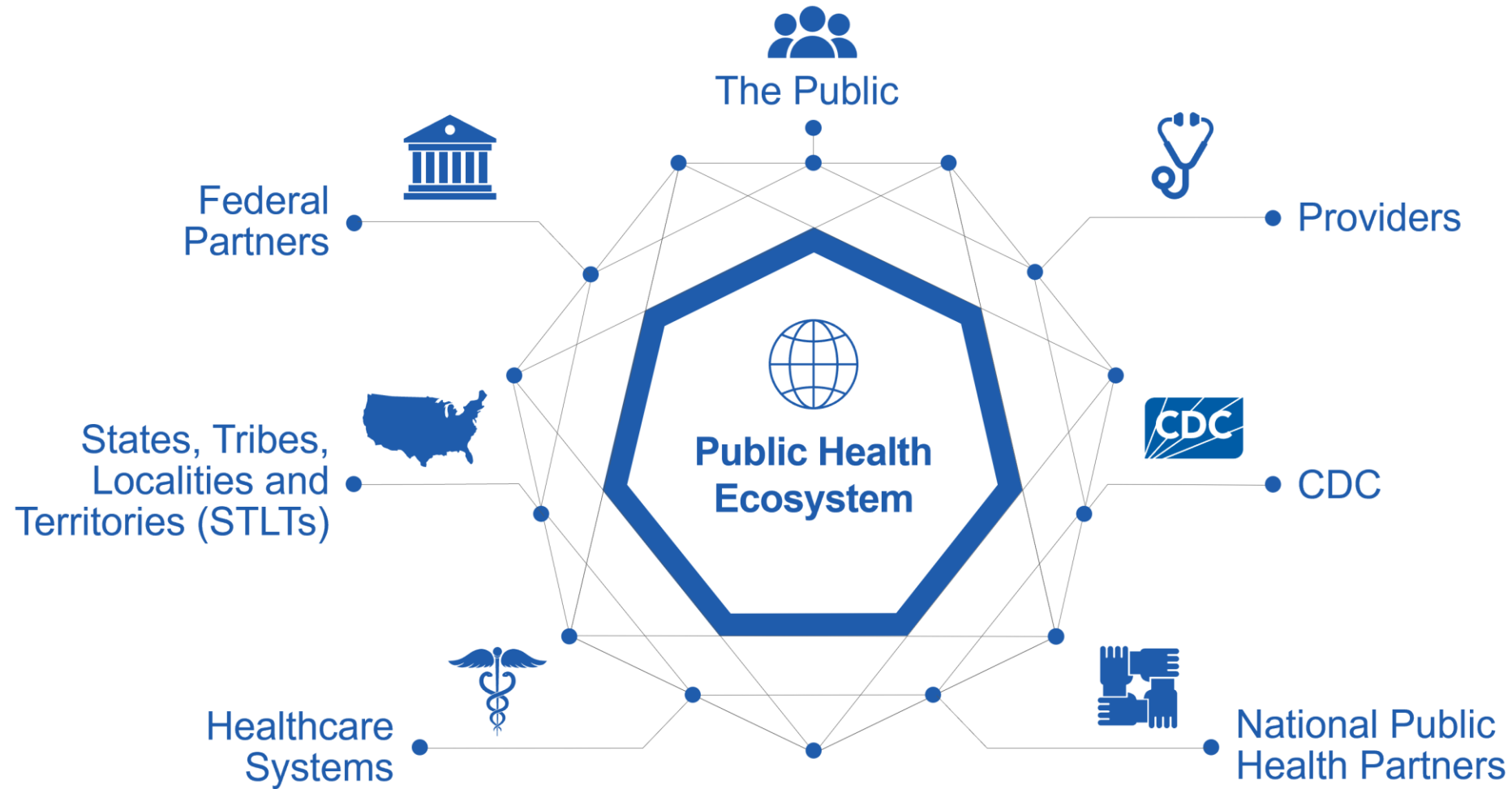


Antibiotic stewardship



Prevention and response

What keeps me up at night



The HAI Program is adaptable

- Specialized but adaptable staff
- Work across the continuum of care
- Conduct specialized surveillance
- Provide rapid needs assessment

**WE ARE HERE
FOR YOU**

Thank you!

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