Oregon Public Health

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













2014



Contents

» Executive Summary	
» Executive Summary» Background	ţ
» Methods and metrics	
» Central line-associated bloodstream infections (CLABSI) in adult intensive care units (ICUs)	
» Central line-associated bloodstream infections (CLABSI) in neonatal ICUs (NICUs)	
» Catheter-associated urinary tract infections (CAUTI) in adult and pediatric ICUs	
» Hospital-onset Clostridium difficile laboratory-identified events	
 Hospital-onset Methicillin-resistant Staphylococcus aureus bloodstream infection (MRSA BSI) 	
» Surgical site infection (SSI) following coronary artery bypass graft surgery with both chest and donor site incisions (CBGB)	
>> Surgical site infection (SSI) following laminectomy (LAM)	
» Surgical site infection (SSI) following colon surgery (COLO)	
>> Surgical site infection (SSI) following abdominal hysterectomy (HYST)	
» Surgical site infection (SSI) following hip replacement surgery (HPRO)	
>> Surgical site infection (SSI) following knee replacement surgery (KPRO)	
 Bloodstream infections (BSI) in freestanding outpatient dialysis facilities 	
» Health care worker influenza vaccination	

Executive summary: Health care-associated infections in Oregon hospitals — 2014

Health care-associated infections (HAIs) can have devastating consequences for patients. The summary below shows how 2014 data from 61 Oregon hospitals compares to: 1) recent HAI data for the U.S. as a whole; and 2) national HAI reduction targets set for 2013 by the U.S. Department of Health and Human Services (HHS).*

SSIs

SURGICAL SITE INFECTIONS

An SSI occurs when germs enter a surgical wound during or after surgery. The data below are for deep incisional and organ space SSIs only.

CLABSIs[†]

CENTRAL LINE-ASSOCIATED BLOODSTREAM INFECTIONS 35 INFECTIONS

A CLABSI occurs when germs enter the blood along a tube (central line) placed in a large vein.

Oregon \(\nsigma\) Performed statistically better than the U.S.

hospitals \ \ \ \ Exceeded national reduction target set by HHS

MRSA BLOODSTREAM INFECTIONS (MRSA BSIs)

HOSPITAL-ONSET MRSA BSI 61 LABORATORY-IDENTIFIED EVENTS

An MRSA BSI is a difficult to treat infection caused by germs that enter the body through wounds or medical devices.

Oregon • Performed statistically better than the U.S.

hospitals
✓ Exceeded national reduction target set by HHS

C. Difficile infections

HOSPITAL-ONSET C. DIFFICILE

732 LABORATORY-IDENTIFIED EVENTS

C. difficile spreads to patients from unclean hands and surfaces in hospitals, leading to colon infection and diarrhea.

Oregon \ \square Performed statistically better than the U.S.

hospitals \(\times \) Did not meet national reduction target set by HHS

CAUTIS

CATHETER-ASSOCIATED URINARY TRACT INFECTIONS 182 INFECTIONS

CAUTIS occur when germs travel up a urinary catheter that was not put in correctly, not kept clean, or left in too long.

Oregon Performed statistically equal to the U.S.

hospitals | X Did not meet national reduction target set by HHS

Coronary artery bypass graft (heart surgery) 10 SSI

Oregon Performed statistically equal to the U.S. **hospitals** • Exceeded national reduction target set by HHS

Laminectomy (back surgery) 30 SSI

Oregon *One one of the original of the origi* **hospitals** • Exceeded national reduction target set by HHS

Colon surgery 101 SSI

Oregon Performed statistically equal to the U.S. hospitals \(\times \) Did not meet national reduction target set by HHS

Abdominal hysterectomy surgery 25 SSI

Oregon Performed statistically equal to the U.S. hospitals \(\times \) Did not meet national reduction target set by HHS

Hip replacement surgery 56 SSI

Oregon Performed statistically equal to the U.S. hospitals | X Did not meet national reduction target set by HHS

Knee replacement surgery 41 SSI

Oregon Performed statistically equal to the U.S. hospitals \ \ \ Exceeded national reduction target set by HHS

THE TAKE AWAY

In 2014, Oregon hospitals exceeded national targets for reducing bloodstream infections and infections following heart, back and knee surgeries. More work is needed to prevent *C. difficile* infections, catheter-associated urinary tract infections and infections following colon, hysterectomy and hip surgeries.

Statistical comparisons made using the Oregon 2014 standardized infection ratio (SIR) for each infection; see table.

[†] All CLABSIs combined for adult and neonatal ICUs; see table for separate data by ICU type

Executive summary: Health care-associated infections in Oregon hospitals — 2014

Health care-associated infection type	National baseline years	HHS reduction target*	# OR hospitals reporting [†]	2014 Oregon SIR‡	2014 SIR meets HHS reduction target?	2014 OR SIR vs. 2013 nat'l SIR ^{II}	2014 OR SIR vs. 2013 OR SIR§
CLABSI in adult ICUs	2006–2008	50% (SIR=0.5)	41	0.24	✓ YES	Statistically better	16%
CLABSI in NICUs	2006–2008	50% (SIR=0.5)	7	0.60	✗ NO	Statistically equal	103%
CAUTI in ICUs	2009	25% (SIR=0.75)	42	1.11	✗ NO	Statistically equal	N/A (no 2013 data)
C. difficile hospital- onset LabID events	2010–2011	30% (SIR=0.7)	61	0.73	✗ NO	Statistically better	4%
MRSA BSI hospital- onset LabID events	2010–2011	25% (SIR=0.75)	61	0.65	✓ YES	Statistically better	N/A (no 2013 data)
SSI: Heart (CBGB)	2006–2008	25% (SIR=0.75)	14	0.35	✓ YES	Statistically equal	42%
SSI: Back (laminectomy)	2006–2008	25% (SIR=0.75)	22	0.53	✓ YES	No 2013 national data	38%
SSI: Colon	2006–2008	25% (SIR=0.75)	41	0.85	✗ NO	Statistically equal	10%
SSI: Abdominal hysterectomy	2006–2008	25% (SIR=0.75)	35	0.91	✗ NO	Statistically equal	20%
SSI: Hip replacement	2006–2008	25% (SIR=0.75)	42	0.83	✗ NO	Statistically equal	14%
SSI: Knee replacement	2006–2008	25% (SIR=0.75)	43	0.65	✓ YES	Statistically equal	6%

^{*} The U.S. Department of Health and Human Services (HHS) determined target 5-year HAI reductions in 2009: www.health.gov/hcq/pdfs/HAI-Targets.pdf



[†] Hospitals are exempt from reporting CLABSIs if fewer than 50 central line days, CAUTIs if they have no ICUs and specific SSIs if fewer than 20 procedures performed annually

^{*} Standardized Infection Ratio: (observed infections)/(expected # based on risk-adjusted national baseline rates)

No 2014 national data available at the time of report publication, so 2013 data were used, available here: www.cdc.gov/hai/progress-report/index.html

 $[\]S$ None of the changes in state SIRs from 2013 to 2014 were statistically significant

Background

One in 25 hospitalized patients in the U.S. acquires a health careassociated infection (HAI) while receiving medical treatment. As a result, approximately 722,000 patients per year experience an HAI.¹ Consequences of HAIs include increased morbidity, mortality, length of hospital stay and health care costs. Economists estimate the annual direct medical costs associated with HAIs in the U.S. range from \$32 to \$51 billion in 2014 inflation-adjusted dollars.²

In 2007, the Oregon Legislative Assembly passed House Bill 2524, which created Oregon's HAI reporting program. The law requires health care facilities to report specific HAIs to the Oregon Health Authority (OHA). The Oregon Healthcare-Associated Infections Advisory Committee (HAIAC) was formed in 2009 to provide

guidance for the mandatory reporting of HAIs. The HAIAC is a diverse group of stakeholders that includes provider, consumer, insurer, public health, academic and health care quality improvement representatives. Oregon Revised Statute 442.851 mandates committee representation for Oregon acute health care, long-term care, ambulatory surgical center and critical access facilities.

In 2014, hospitals were required to report up to 10 HAIs and rates of vaccination of health care workers (HCW) against influenza (Table 1). Since 2009, the HAIAC has progressively added mandatory reporting requirements for hospitals, dialysis facilities, ambulatory surgical centers and skilled nursing facilities (Appendix I).

Table 1. Required HAI reporting elements for Oregon, 2014

Health care-associated infection	Abbreviation	Locations specified
Central line-associated bloodstream infection	CLABSI	Hospitals Adult medical and surgical intensive care units (ICUs) Neonatal ICUs (NICUs) >50 central line days
Catheter-associated urinary tract infection	CAUTI	Hospitals • All adult and pediatric ICUs • >50 catheter days
Laboratory-identified (LabID) hospital-onset (HO) Clostridium difficile infection	HO-CDI	Hospitals: • Facility-wide excluding neonatal, well-baby, and (babies in) post-partum units
LabID HO methicillin-resistant <i>Staphylococcus aureus</i> (MRSA) bloodstream infections	HO-MRSA BSI	Hospitals: • Facility-wide
Surgical site infections	SSI	
Coronary artery bypass graft: chest & donor site incisions	CBGB	
Laminectomy (back surgery)	LAM	Hospitals:
Colon surgery	COLO	Inpatient procedures only
Abdominal hysterectomy	HYST	>20 procedures of any reportable surgery reported annually
Hip prosthesis surgery	HPRO	
Knee prosthesis surgery	KPRO	
Dialysis events: bloodstream infections	BSI	Free-standing dialysis facilities • Facility-wide
Health care worker influenza vaccination	HCW influenza vaccination	Hospitals Ambulatory surgical centers Skilled nursing facilities

^{*}Intensive care units

Intended audience

This report is intended for those interested in detailed HAI and HCW influenza data for Oregon as a whole and for specific facilities. The facility-specific tables assume a working knowledge of HAI metrics and may be most appropriate for health care providers, administrators, quality improvement professionals and public health professionals.

Alternate data presentation forums

- For a more concise version of this report, please see the <u>2014</u> <u>Oregon HAI Report for Consumers</u> posted on OHA's Healthcare-Associated Infections website
- To examine detailed HAI data by region, including trends over time for each facility, please see <u>Oregon's Clickable Oregon</u> <u>HAI map</u>.

Data collection and exemptions

Facilities reported 2014 data to OHA (Table 1) through the National Healthcare Safety Network (NHSN), which is managed by the Centers for Disease Control and Prevention (CDC). Protocols for HAI, dialysis event and health care worker influenza vaccination modules used by Oregon facilities can be found on CDC's NHSN infection tracking page. NHSN-generated metrics are based on monthly submission of numerator and denominator data. Per Oregon Administrative Rule (OAR) 333-018, facilities are required to submit required data elements to NHSN within 30 days of the end of each data collection month.

Hospitals are eligible for exemption from reporting specific HAIs if annual device use, patient volume, or procedure volume is low. OHA grants exemptions from CLABSI reporting if hospitals report fewer than 50 central line days annually, from CAUTI reporting if they report fewer than 50 urinary catheter days annually, and from procedure-specific SSI reporting if they report performing fewer than 20 of a reportable surgical procedure. Some hospitals choose to report voluntarily despite meeting exemption criteria.

Data validation by OHA

Before publication, OHA staff review all data submitted and notify facilities of the following data omissions or aberrations: missing months, surgical procedure times less than five minutes or greater than five times the interquartile range (IQR5), unknown or atypical surgical wound class categorization, and any other non-logical data element. Facilities were given two months to respond and correct any errors.

Since 2009, OHA has undertaken a number of external validation efforts in which OHA staff independently and retrospectively review clinical and laboratory information to ensure data have been correctly reported. Such validations have been conducted for CLABSI (2009 and 2012), SSI-CBGB (2010–2011), and CDI (2013).

Metrics

This report characterizes HAIs using the standardized infection ratio (SIR). The CDC recommends using this metric, which is the ratio of the observed number of infections reported in 2014 to the predicted number for 2014, based on risk-adjusted national baseline rates. The risk adjustment inherent in the SIR makes comparisons between hospitals more fair; for example, CLABSIs and CAUTIs are adjusted for hospital location; hospital-onset MRSA and CDI LabID events are adjusted for admission prevalence and laboratory testing methods; and SSIs are adjusted for patient-level risk factors. The CDC posts risk adjustment methods in a technical appendix for NHSN reporting, as well as in-depth statistical explanations for SSI and LabID event risk adjustment.

Dialysis events are presented as the incidence of bloodstream infections (BSIs) per 100 patient-months, using NHSN protocols. To benchmark facility performance, facility rates are stratified by access type and compared to national pooled means.

Health care worker (HCW) influenza vaccination data for the 2014–2015 influenza season are presented as a rate for HCWs without medical contraindication to vaccination. <u>Healthy People 2020</u> (HP2020) and 2015 (HP2015) goals were used as benchmarks.

Aggregate data for all Oregon facilities

For each metric required by Oregon's HAI reporting program — including 10 HAIs, dialysis bloodstream infections and health care worker influenza vaccination — this report dedicates a single page to summarizing Oregon's 2014 data. The 2014 data is compared to previous years' data, to national baselines, to current national distributions and to targets set by national health authorities. Each summary page is followed by tables, alphabetized by facility name, with facility-specific data. The number of infections included in the "All Oregon" row of the facility-specific tables (top row) can differ slightly from the total number of facility-specific infections, since some infections could not be included in the aggregate All Oregon SIR. In a few instances, infections were reported to OHA directly, and not through NHSN; these infections, while reported in the "Executive summary" and in facility-specific rows, are omitted from the All Oregon rows because they do not contribute to the All Oregon SIR.

Facility-specific table elements

- Facility name. Facilities are listed if they reported data to OHA without filing for exemption based on patient or procedure volume. Facilities missing from the tables applied for, and were granted, exemption from reporting.
- Total observed infections. Total number of infections or LabID events meeting the NHSN criteria for reporting
- Predicted infections. A calculated value that reflects the number of infections (or events for LabID reporting) "predicted" for 2014, based on risk-adjusted national baselines.
- Standardized infection ratio (SIR). This measure divides the number of observed infections (or events) by the number of predicted infections (or events).
- **SIR value.** An SIR value of one indicates a facility observed the same number of infections (or LabID events) as would be predicted from risk-adjusted national baselines. Values less than one indicate a facility has performed better than predicted based on national baselines (i.e., fewer infections). Values greater than one indicate a facility has performed worse than predicted (i.e., more infections).

- 95% confidence interval (CI). There is a 95% chance the true SIR lies within this range of values. If this range includes the value of one, the SIR is not statistically significant. A confidence interval cannot be calculated if the SIR is not calculated. A mid-P exact test is used to determine statistical significance.
- Direction and significance. The following symbols indicate how a facility's observed number of HAIs in 2014 compares to the number predicted based on national baseline data collected by CDC:
 - Statistically fewer infections
 - Fewer infections (not statistically significant)
 - More infections (not statistically significant)
 - Statistically more infections
- Percentile range on 2013 national SIR distribution (new this year). At the time of this report's publication, the most recent national distribution for facility-specific SIRs published by CDC was for the 2013 calendar year. For each facility with an SIR calculated, the percentile range of where that SIR falls on the 2013 national distribution is shown.
- Benchmarks: met 2013 HHS target SIR or zero infections (new this year). Benchmarks can help facilities assess progress towards HAI prevention goals. While the ultimate goal for all hospitals should be zero infections, five-year HAI reduction targets set by the U.S. Department of Health and Human Services (HHS) in 2009 (for 2013) reflect whether hospitals have reduced HAIs substantially since baseline data were collected. In this report, hospitals receive a green check (✓) if the 2014 SIR and the upper confidence interval was at or below the HHS target, and a grey check () if the SIR was at or below the target but the upper confidence interval was above the target. Hospitals without 2014 SIR calculations, because of statistical uncertainty and predicted values less than one, received a grey check if they had zero infections. Hospitals without checks did not meet HAI reduction benchmarks in 2014, and should consider redoubling prevention efforts to meet benchmarks in 2015 and beyond.

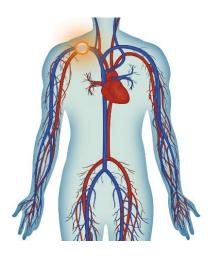
Central line-associated bloodstream infections (CLABSI) in adult intensive care units (ICU)

Central line-associated bloodstream infections (CLABSIs) occur when microorganisms enter the bloodstream through central venous catheters. Mortality from CLABSIs is approximately 12–25%.³ Large gains in CLABSI prevention have been made over the past decade due to standardization and monitoring of central line insertion and maintenance.⁴

Since 2009, hospitals in Oregon have reported CLABSIs in adult medical, surgical, and medical-surgical ICUs as required by the HAI reporting program. Beginning in 2015, hospitals also will report CLABSIs for all adult and pediatric medical wards. In 2014, Oregon's SIR was 0.24, meaning Oregon had 76% fewer infections than would be predicted based on risk-adjusted national baselines. Further, Oregon hospitals exceeded the 2013 HHS target SIR of 0.5 (Figure 1, green line). When comparing Oregon's adult ICU 2014 CLABSI SIR to the most recent annual adult ICU SIRs published by CDC (Figure 1, purple line), Oregon's SIR was statistically lower (p<0.0001).

1.1 Oregon SIRs for CLABSI in adult ICUs National baseline = 1.00 1.0 (2006 - 2008)0.9 0.83 8.0 0.7 0.6 2013 HHS target = 0.50 0.5 2013 National SIR = 0.50 0.45 0.4 0.36 0.35 0.28 0.3 0.24 0.2 0.1 0.0 2009 2010 2011 2012 2013 2014 95% confidence interval around SIR Oregon state SIR

Figure 1. Oregon CLABSI standardized infection ratios (SIR) in adult ICUs: 2009–2014



What can providers do to prevent CLABSI in adult ICUs?

- ✓ Follow central line insertion checklist for each insertion:
 - Clean hands
 - Use appropriate skin antiseptic
 - Wait for skin prep to dry
 - Use sterile barriers
- ✓ Once line is in place:
 - Follow recommended maintenance practices
 - Perform hand hygiene before/after touching line
- ✓ Remove central line as soon as it is no longer needed

CDC prevention resources:

www.cdc.gov/HAI/bsi/CLABSI-resources.html

2013 National SIR Distribution: CLABSI Adult ICUs
0.000 0.108 0.416 0.750 1.175
0% 10% 25% 50% 75% 90% 100%

Table 3. Facility-specific 2014 annual CLABSI data for adult ICUs (n=41)

		Star	ndardized infe	ection ra	atio (SIR)		2014 SIR ir	nterpretation and ben	2014 SIR interpretation and benchmarking			
Hospital name*	Central line days	Observed infections (Obs.)	Predicted infections† (Pred.)	SIR: Obs. ÷ Pred.	SIR Lower 95% CI	SIR Upper 95% CI	Statistical comparison to national baseline (2006–2008)	Percentile range on 2013 national SIR distribution (lower = better) [¶]	Benchmarks: met 2013 HHS target (≤0.5) or zero infections**			
All Oregon	55,064	23	96.1	0.24	0.16	0.35	Statistically fewer infections	See executive summary	✓ Met HHS target			
Adventist Medical Center	1,700	1	2.6	0.39	0.02	1.93	Fewer infections	26–50th	✓ Met HHS target			
Asante Rogue Regional Medical Center	2,573	3	3.9	0.78	0.20	2.12	Fewer infections	76–90th				
Asante Three Rivers Medical Center	774	0	1.2	0.00	II	2.58	Fewer infections	0_10th	Met HHS target Zero infections			
Ashland Community Hospital	70	0	0.1	§					✓ Zero infections			
Bay Area Hospital	716	0	1.1	0.00	II	2.79	Fewer infections	0_10th	Met HHS target Zero infections			
Columbia Memorial Hospital	40	0	0.06	§					✓ Zero infections			
Good Samaritan Regional Medical Center	1,925	1	2.9	0.35	0.02	1.71	Fewer infections	26–50th	✓ Met HHS target			
Good Shepherd Medical Center	43	0	0.06	§					✓ Zero infections			
Grande Ronde Hospital	96	0	0.1	§					✓ Zero infections			
Kaiser Permanente Sunnyside Medical Center	1,558	2	2.3	0.86	0.14	2.83	Fewer infections	76–90th				
Legacy Emanuel Medical Center	4,204	3	8.8	0.34	0.09	0.93	Statistically fewer infections	26–50th	✓ Met HHS target			
Legacy Good Samaritan Medical Center	2,740	1	4.1	0.24	0.01	1.20	Fewer infections	26–50th	✓ Met HHS target			
Legacy Meridian Park Medical Center	1,017	1	1.5	0.66	0.03	3.23	Fewer infections	51–75th 0% 100%				

2013 National SIR Distribution: CLABSI Adult ICUs
0.000 0.108 0.416 0.750 1.175
0% 10% 25% 50% 75% 90% 100%

Table 3. Facility-specific 2014 annual CLABSI data for adult ICUs (n=41)

		Stai	ndardized infe	ection ra	atio (SIR)		2014 SIR interpretation and benchmarking				
Hospital name*	Central line days	Observed infections (Obs.)	Predicted infections† (Pred.)	SIR: Obs. ÷ Pred.	SIR Lower 95% CI	SIR Upper 95% CI	Statistical comparison to national baseline (2006–2008)	Percentile range on 2013 national SIR distribution (lower = better) ¶	Benchmarks: met 2013 HHS target (≤0.5) or zero infections**		
Legacy Mount Hood Medical Center	1,029	0	1.5	0.00	II	1.94	Fewer infections	0–10th	Met HHS target Zero infections		
McKenzie-Willamette Medical Center	996	2	1.5	1.34	0.22	4.42	More infections	91–100th			
Mercy Medical Center	1,316	0	2.0	0.00	II	1.52	Fewer infections	0_10th	Met HHS target Zero infections		
Mid-Columbia Medical Center	116	0	0.2	§					✓ Zero infections		
Oregon Health & Science University	6,800	3	16.6	0.18	0.05	0.49	Statistically fewer infections	26–50th	✓ Met HHS target		
Peace Harbor Hospital	97	0	0.2	§					✓ Zero infections		
Providence Hood River Memorial Hospital	35	0	0.05	§					✓ Zero infections		
Providence Medford Medical Center	2,339	0	3.5	0.00	II	0.85	Statistically fewer infections	0–10th	Met HHS target Zero infections		
Providence Milwaukie Hospital	322	0	0.5	§					✓ Zero infections		
Providence Newberg Medical Center	416	0	0.6	§					✓ Zero infections		
Providence Portland Medical Center	4,318	2	6.5	0.31	0.05	1.02	Fewer infections	26–50th	✓ Met HHS target		
Providence Seaside Hospital	33	0	0.06	§					✓ Zero infections		
Providence St. Vincent Medical Center	1,590	0	2.4	0.00	II	1.26	Fewer infections	0–10th	Met HHS target Zero infections		
Providence Willamette Falls Medical Center	436	0	0.7	§					✓ Zero infections		

2013 National SIR Distribution: CLABSI Adult ICUs
0.000 0.108 0.416 0.750 1.175

0% 10% 25% 50% 75% 90% 100%

Table 3. Facility-specific 2014 annual CLABSI data for adult ICUs (n=41)

		Stai	ndardized infe	ection ra	atio (SIR)		2014 SIR in	terpretation and ben	
Hospital name*	Central line days	Observed infections (Obs.)	Predicted infections† (Pred.)	SIR: Obs. ÷ Pred.	SIR Lower 95% CI	SIR Upper 95% CI	Statistical comparison to national baseline (2006–2008)	Percentile range on 2013 national SIR distribution (lower = better) [¶]	Benchmarks: met 2013 HHS target (≤0.5) or zero infections**
Sacred Heart Medical Center - Riverbend	6,338	2	13.7	0.15	0.03	0.48	Statistically fewer infections	26–50th	✓ Met HHS target
Salem Hospital	4,196	1	6.3	0.16	0.01	0.78	Statistically fewer infections	26–50th	✓ Met HHS target
Samaritan Albany General Hospital	478	0	0.7	§					✓ Zero infections
Samaritan Lebanon Community Hospital	282	0	0.4	§					✓ Zero infections
Samaritan Pacific Communities Hospital	272	0	0.4	§					✓ Zero infections
Silverton Hospital	55	0	0.08	§					✓ Zero infections
Sky Lakes Medical Center	1,204	0	1.8	0.00	II	1.66	Fewer infections	0–10th	Met HHS target Zero infections
St. Alphonsus Medical Center - Ontario	117	0	0.2	§					✓ Zero infections
St. Anthony Hospital	432	0	0.7	§					✓ Zero infections
St. Charles Medical Center - Bend	2,626	1	3.9	0.25	0.01	1.25	Fewer infections	26–50th	✓ Met HHS target
St. Charles Medical Center - Redmond	262	0	0.4	§					✓ Zero infections
Tillamook County Hospital	26	0	0.04	§					✓ Zero infections
Tuality Community Hospital	693	0	1.0	0.00	II	2.88	Fewer infections	0–10th	Met HHS target Zero infections
Willamette Valley Medical Center	714	0	1.5	0.00	II	2.00	Fewer infections	0–10th	Met HHS target Zero infections

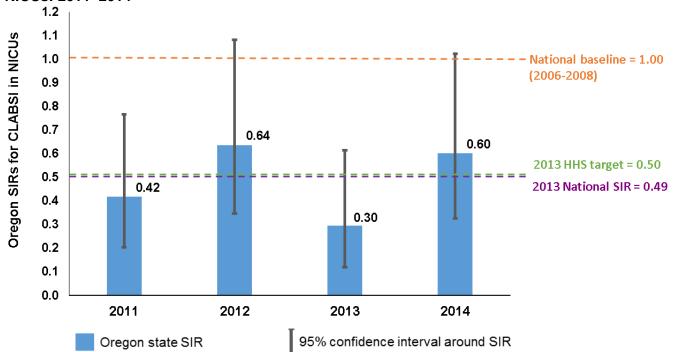
- * 41 hospitals reported adult ICU CLABSIs to OHA; 20 hospitals with no ICUs or fewer than 50 central line days annually applied for exemption from reporting
- † Predicted number of infections based on national CLABSI data from 2006–2008, adjusted for central line days and other risk factors (see methods)
- § SIR is not calculated when the predicted number of infections is <1 per CDC protocols
- || If the SIR is 0, no lower 95% confidence interval (CI) is reported
- ¶ No 2014 national data available at the time of report publication, so 2013 data were used, available here: www.cdc.gov/hai/progress-report/index.html
- ** The U.S. Department of Health and Human Services (HHS) set a five-year CLABSI reduction target of 50% (SIR=0.5) in 2009: www.health.gov/hcg/pdfs/HAI-Targets.pdf

Central line-associated bloodstream infections (CLABSI) in neonatal intensive care units (NICUs)

Central line-associated bloodstream infections (CLABSI) occur when microorganisms enter the bloodstream through catheters inserted into large veins for medication delivery and monitoring. Immature immune systems and compromised skin make neonates, and in particular preterm infants, vulnerable to infection. NICU CLABSIs can be prevented with bundled interventions emphasizing vigilance in line maintenance, attention to removal of lines when appropriate, and collaborative partnerships between medical providers and families.^{5,6}

Oregon NICUs have reported CLABSIs to OHA since 2011. In 2014, Oregon's CLABSI NICU SIR was 0.60, but not statistically different from one; NICUs did not collectively meet the 2013 HHS target SIR of 0.50 (Figure 2, green line). When comparing Oregon's 2014 CLABSI NICU SIR to the most recent annual CLABSI NICU SIRs published by CDC (Figure 2, purple line), Oregon's SIR was higher but statistically equivalent (p=0.51).

Figure 2. CLABSI standardized infection ratios with 95% confidence intervals for Oregon NICUs: 2011–2014





What can providers do to prevent CLABSI in NICUs?

- ✓ Follow central line insertion checklist and only allow trained professionals to insert lines
- ✓ Pay close attention to line maintenance:
 - Follow evidence-based guidelines for maintenance
 - Emphasize hand hygiene
 - Educate parents and visitors
- Assess and address local challenges to recommended practices
- ✓ Remove central line as soon as it is no longer needed

CDC prevention resources:

www.cdc.gov/HAI/bsi/CLABSI-resources.html

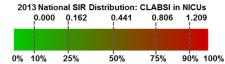


Table 4. Facility-specific 2014 annual CLABSI data for NICUs (n=7)

		Star	ndardized infe	ection ra	atio (SIR)		2014 SIR ii	nterpretation and ben	chmarking
Hospital name*	Central line days	Observed infections (Obs.)	Predicted infections† (Pred.)	SIR: Obs. ÷ Pred.	Lower 95% CI	Upper 95% CI	Statistical comparison to national baseline (2006–2008)	Percentile range on 2013 national SIR distribution (lower = better) ¶	Benchmarks: met 2013 HHS target (≤0.5) or zero infections**
All Oregon	9,334	12	20.0	0.60	0.33	1.02	Fewer infections	See executive summary	
Asante Rogue Regional Medical Center	483	0	0.9	§					✓ Zero infections
Legacy Emanuel Medical Center	2,076	4	3.7	1.09	0.35	2.62	More infections	76–90th	
Oregon Health & Science University	3,917	3	8.8	0.34	0.09	0.93	Statistically fewer infections	26–50th	✓ Met HHS target
Providence St. Vincent Medical Center	1,813	3	4.6	0.65	0.17	1.78	Fewer infections	51–75th	
Sacred Heart Medical Center - Riverbend	609	1	1.1	0.90	0.05	4.45	Fewer infections	76–90th	
Salem Hospital	198	1	0.4	§					
St. Charles Medical Center - Bend	238	0	0.5	§					✓ Zero infections

^{* 7} hospitals reported NICU CLABSIs to OHA; 54 hospitals were exempt from reporting because they did not have a NICU

[†] Predicted number of infections based on national CLABSI data from 2006–2008, adjusted for central line days and other risk factors (see methods)

[§] SIR is not calculated when the predicted number of infections is <1 per CDC protocols

[¶] No 2014 national data available at the time of report publication, so 2013 data were used, available here: www.cdc.gov/hai/progress-report/index.html

^{**} The U.S. Department of Health and Human Services (HHS) set a five-year CLABSI reduction target of 50% (SIR=0.5) in 2009: www.health.gov/hcq/pdfs/HAI-Targets.pdf

Catheter-associated urinary tract infections (CAUTI) in adult and pediatric intensive care units (ICUs)

Catheter-associated urinary tract infections (CAUTI) occur when microorganisms travel up urinary catheters and cause infection to the bladder and kidneys. A major risk factor for CAUTI acquisition is long urinary catheter use duration. Use of urinary catheters is common in ICUs, so it is particularly important in these settings to ensure appropriate insertion and maintenance practices.⁷

In Oregon, adult and pediatric ICUs began reporting CAUTI to OHA for the first time in 2014. In 2015, CAUTI data will be reportable from all adult and pediatric medical wards as well as ICUs. In 2014, Oregon ICUs had an SIR of 1.11 meaning they had more CAUTIs than would be predicted based on risk-adjusted baselines, but this difference was not statistically significant. Oregon ICUs did not collectively meet the 2013 HHS target SIR of 0.75 (Figure 3, green line). When comparing Oregon's 2014 ICU CAUTI SIR to the most recent annual CAUTI ICU SIR published by CDC (Figure 3, purple line), Oregon's SIR was lower than the national SIR but statistically equivalent (p=0.41).

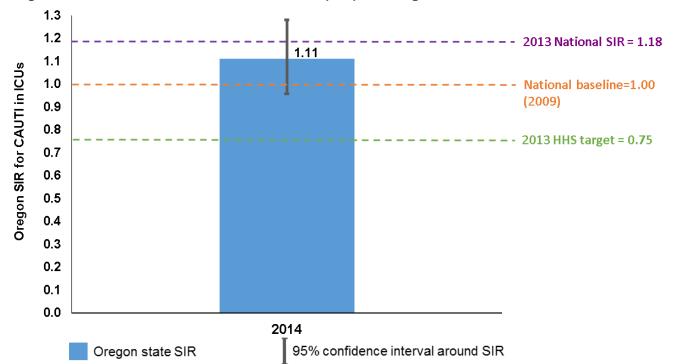
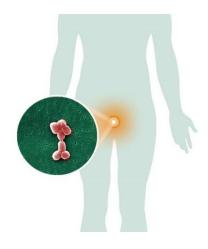


Figure 3. CAUTI standardized infection ratio (SIR) for Oregon ICUs



What can providers do to prevent CAUTI in adult and pediatric ICUs?

- Only insert catheters when necessary and remove as soon as possible
- ✓ Allow only trained professionals to insert catheters using sterile technique
- ✓ Pay close attention to line maintenance:
 - Clean hands before/after handling
 - Avoid disconnecting catheter from drain tube
 - Do not let drain spout touch anything while emptying

CDC prevention resources:

www.cdc.gov/HAI/ca uti/uti.html

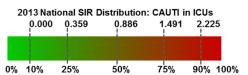


Table 5. Facility-specific 2014 annual CAUTI data for adult and pediatric ICUs (n=42)

		Star	ndardized infe	ection ra	atio (SIR)		2014 SIR ir	nterpretation and ben	chmarking
Hospital name*	Urinary cath. days	Observed infections (Obs.)	Predicted infections† (Pred.)	SIR: Obs. ÷ Pred.	SIR Lower 95% CI	SIR Upper 95% CI	Statistical comparison to national baseline (2009)	Percentile range on 2013 national SIR distribution (lower = better) ¶	Benchmarks: met 2013 HHS target (≤0.75) or zero infections**
All Oregon	88,974	182	164.1	1.11	0.96	1.28	More infections	See executive summary	
Adventist Medical Center	1,802	2	2.3	0.85	0.14	2.82	Fewer infections	26–50th	
Asante Rogue Regional Medical Center	6,653	10	9.6	1.04	0.53	1.86	More infections	51–75th 0% 100%	
Asante Three Rivers Medical Center	1,585	1	2.1	0.49	0.02	2.39	Fewer infections	26–50th	✓ Met HHS target
Ashland Community Hospital	107	0	0.1	§					✓ Zero infections
Bay Area Hospital	1,244	0	1.6	0.00	II	1.85	Fewer infections	0–10th	Met HHS target Zero infections
Columbia Memorial Hospital	157	1	0.2	§					
Good Samaritan Regional Medical Center	2,426	6	3.2	1.90	0.77	3.96	More infections	76–90th	
Grande Ronde Hospital	253	0	0.3	§					✓ Zero infections
Kaiser Permanente Sunnyside Medical Center	3,492	4	4.9	0.82	0.26	1.97	Fewer infections	26–50th	
Legacy Emanuel Medical Center	9,378	42	27.0	1.56	1.14	2.09	Statistically more infections	76–90th	
Legacy Good Samaritan Medical Center	2,867	3	3.4	0.87	0.22	2.37	Fewer infections	26–50th	
Legacy Meridian Park Medical Center	1,086	3	1.3	2.30	0.59	6.27	More infections	91–100th	
Legacy Mount Hood Medical Center	1,173	2	1.5	1.31	0.22	4.33	More infections	51–75th 0% 100%	
McKenzie-Willamette Medical Center	2,154	2	2.8	0.71	0.12	2.36	Fewer infections	26–50th	✓ Met HHS target

Table 5. Facility-specific 2014 annual CAUTI data for adult and pediatric ICUs (n=42)

		Star	ndardized infe	ection ra	atio (SIR)		2014 SIR interpretation and benchmarking			
Hospital name*	Urinary cath. days	Observed infections (Obs.)	Predicted infections† (Pred.)	SIR: Obs. ÷ Pred.	SIR Lower 95% CI	SIR Upper 95% CI	Statistical comparison to national baseline (2009)	Percentile range on 2013 national SIR distribution (lower = better) ¶	Benchmarks: met 2013 HHS target (≤0.75) or zero infections**	
Mercy Medical Center	2,525	1	3.0	0.33	0.02	1.63	Fewer infections	11–25th	✓ Met HHS target	
Mid-Columbia Medical Center	293	0	0.4	§					✓ Zero infections	
Oregon Health & Science University	14,619	60	42.7	1.41	1.08	1.80	Statistically more infections	51–75th 0% 100%		
Peace Harbor Hospital	239	0	0.3	§					✓ Zero infections	
Pioneer Memorial Hospital (St. Charles – Prineville)	57	0	0.1	§					✓ Zero infections	
Providence Hood River Memorial Hospital	86	0	0.1	§					✓ Zero infections	
Providence Medford Medical Center	2,404	2	3.1	0.64	0.11	2.11	Fewer infections	26–50th	✓ Met HHS target	
Providence Milwaukie Hospital	473	0	0.6	§					✓ Zero infections	
Providence Newberg Medical Center	587	2	0.8	§						
Providence Portland Medical Center	4,712	9	5.7	1.59	0.78	2.92	More infections	76–90th		
Providence Seaside Hospital	116	0	0.2	§					✓ Zero infections	
Providence St. Vincent Medical Center	4,339	10	7.5	1.33	0.67	2.37	More infections	51–75th		
Providence Willamette Falls Medical Center	624	1	0.8	§						
Sacred Heart Medical Center - Riverbend	7,186	5	17.2	0.29	0.11	0.64	Statistically fewer infections	11–25th	✓ Met HHS target	
Salem Hospital	5,580	4	6.7	0.60	0.19	1.44	Fewer infections	26–50th	✓ Met HHS target	

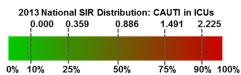


Table 5. Facility-specific 2014 annual CAUTI data for adult and pediatric ICUs (n=42)

		Star	ndardized infe	ection ra	atio (SIR)		• •	nterpretation and ben	chmarking
Hospital name*	Urinary cath. days	Observed infections (Obs.)	Predicted infections† (Pred.)	SIR: Obs. ÷ Pred.	SIR Lower 95% CI	SIR Upper 95% CI	Statistical comparison to national baseline (2009)	Percentile range on 2013 national SIR distribution (lower = better) ¶	Benchmarks: met 2013 HHS target (≤0.75) or zero infections**
Samaritan Albany General Hospital	798	2	1.0	1.93	0.32	6.37	More infections	76–90th	
Samaritan Lebanon Community Hospital	550	0	0.7	§					✓ Zero infections
Samaritan North Lincoln Hospital	195	0	0.3	§					✓ Zero infections
Samaritan Pacific Communities Hospital	445	0	0.6	§					✓ Zero infections
Santiam Memorial Hospital	165	0	0.2	§					✓ Zero infections
Silverton Hospital	321	1	0.4	§					
Sky Lakes Medical Center	2,354	0	3.1	0.00	II	0.98	Statistically fewer infections	0_10th	Met HHS target Zero infections
St. Alphonsus Medical Center - Ontario	505	0	0.7	§					✓ Zero infections
St. Charles Medical Center - Bend	3,486	8	4.2	1.91	0.89	3.63	More infections	76–90th	
St. Charles Medical Center - Redmond	262	0	0.3	§					✓ Zero infections
Tillamook County Hospital	45	0	0.06	§					✓ Zero infections
Tuality Community Hospital	796	0	1.0	0.00	II	2.90	Fewer infections	0–10th	Met HHS target Zero infections
Willamette Valley Medical Center	825	1	1.9	0.53	0.03	2.60	Fewer infections	26–50th	✓ Met HHS target

^{* 42} hospitals reported adult ICU CAUTI to OHA; 19 hospitals with no ICUs or fewer than 50 urinary catheter days annually applied for exemption from reporting

[†] Predicted number of infections based on national CAUTI data from 2009, adjusted for central line days and other risk factors (see methods)

[§] SIR is not calculated when the predicted number of infections is <1 per CDC protocols

^{||} If the SIR is 0, no lower 95% confidence interval (CI) is reported

No 2014 national data available at the time of report publication, so 2013 data were used, available here: www.cdc.gov/hai/progress-eport/index.html

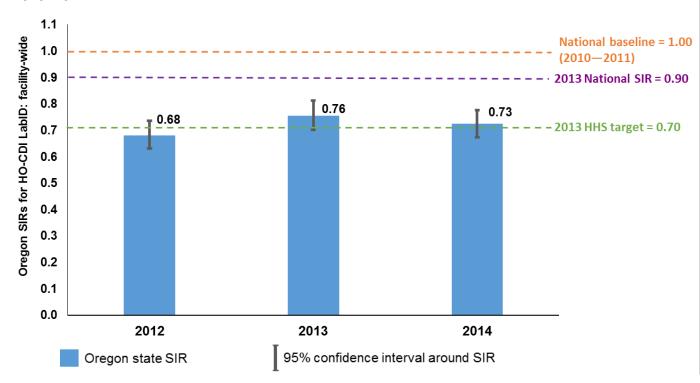
^{**} The U.S. Department of Health and Human Services (HHS) set a five-year CAUTI reduction target of 25% (SIR=0.75) in 2009; www.health.gov/hcg/pdfs/HAI-Targets.pdf

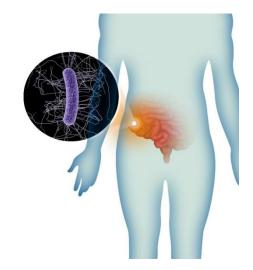
Clostridium difficile (C. difficile) infection

C. difficile is a spore-forming, Gram-positive, toxin-producing bacteria that can lead to severe diarrhea, colitis and sepsis. *C. difficile* caused almost half a million infections in the United States in 2011, and 29,000 infected people died within 30 days of the initial diagnosis.⁸ Those most at risk are older adults who take antibiotics and get medical care.⁹

In Oregon, hospital-onset *C. difficile* identified through laboratory records (LabID events) has been reportable since 2012. In 2014, Oregon's *C. difficile* SIR was 0.73, meaning hospitals reported 27% fewer events than would be predicted based on national baselines. Hospitals did not collectively meet the 2013 HHS target SIR of 0.70 (Figure 4, green line). However, when comparing Oregon's 2014 hospital-onset CDI SIR to the most recent annual SIRs published by CDC (Figure 4, purple line), Oregon's SIR was statistically lower (p<0.0001). To help fight the spread of *C. difficile*, Oregon's interfacility transfer communication law took effect in 2014, which requires health care facilities to notify receiving facilities of a patient's *C. difficile* status upon transfer.

Figure 4. Aggregate hospital-onset *C. difficile* identified through laboratory records for Oregon: 2013–2014





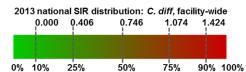
What can providers do to prevent CDI facility-wide?

- ✓ Prescribe antibiotics judiciously
- ✓ Rapidly identify and isolate patients identified with C. difficile
- ✓ Wear gowns and gloves when treating patients with C. difficile
- ✓ Clean surfaces with an EPAapproved disinfectant where C. difficile patients have been treated
- ✓ Notify receiving facility of patients C. difficile status upon transfer

CDC prevention resources:

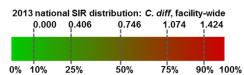
www.cdc.gov/hai/organisms/cdiff/ Cdiff clinicians.html

Table 6. Facility-specific 2014 annual hospital-onset incident *Clostridium difficile* LabID event data for Oregon hospitals: facility-wide (n=61)



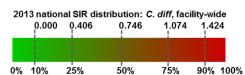
		Stai	ndardized infe	ection ra	atio (SIR)	R) 2014 SIR interpretation and benchmarking					
Hospital name*	Patient days	Observed infections (Obs.)	Predicted infections† (Pred.)	SIR: Obs. ÷ Pred.	Lower 95% CI	Upper 95% CI	Statistical comparison to national baseline (2010–2011)	Percentile range on 2013 national SIR distribution (lower = better) [¶]	Benchmarks: met 2013 HHS target (≤0.7) or zero infections**		
All Oregon	1,389,712	710	978.9	0.73	0.67	0.78	Statistically fewer infections	See executive summary			
Adventist Medical Center	46,010	16	20.2	0.79	0.47	1.26	Fewer infections	51–75th			
Asante Rogue Regional Medical Center	70,188	42	54.8	0.77	0.56	1.03	Fewer infections	51–75th			
Asante Three Rivers Medical Center	25,596	5	18.9	0.26	0.10	0.59	Statistically fewer infections	11–25th	✓ Met HHS target		
Ashland Community Hospital	4,440	4	2.9	1.40	0.45	3.38	More infections	76–90th			
Bay Area Hospital	24,716	15	14.6	1.02	0.60	1.65	More infections	51–75th			
Blue Mountain Hospital	596	0	0.3	§					✓ Zero infections		
Columbia Memorial Hospital	3,048	0	1.6	0.00	II	1.91	Fewer infections	0–10th	Met HHS target Zero infections		
Coquille Valley Hospital District	1,904	2	‡	‡			‡		‡		
Cottage Grove Community Hospital	1,553	4	1.0	3.93	1.25	9.47	Statistically more infections	91–100th			
Curry General Hospital	407	0	0.2	§					✓ Zero infections		
Good Samaritan Regional Medical Center	35,807	14	24.2	0.58	0.33	0.95	Statistically fewer infections	26–50th	✓ Met HHS target		
Good Shepherd Medical Center	4,807	2	3.0	0.67	0.11	2.23	Fewer infections	26–50th	✓ Met HHS target		
Grande Ronde Hospital	4,926	1	2.4	0.41	0.02	2.04	Fewer infections	26–50th	✓ Met HHS target		
Harney District Hospital	1,409	1	0.7	§							

Table 6. Facility-specific 2014 annual hospital-onset incident *Clostridium difficile* LabID event data for Oregon hospitals: facility-wide (n=61)



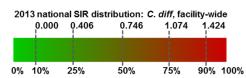
		Star	ndardized infe	ection ra	atio (SIR)		2014 SIR interpretation and benchmarking			
Hospital name*	Patient days	Observed infections (Obs.)	Predicted infections† (Pred.)	SIR: Obs. ÷ Pred.	Lower 95% CI	Upper 95% CI	Statistical comparison to national baseline (2010–2011)	Percentile range on 2013 national SIR distribution (lower = better) [¶]	Benchmarks: met 2013 HHS target (≤0.7) or zero infections**	
Kaiser Permanente Sunnyside Medical Center	53,930	49	43.2	1.14	0.85	1.49	More infections	76–90th		
Kaiser Permanente Westside Medical Center	17,921	17	14.8	1.15	0.69	1.81	More infections	76–90th		
Lake District Hospital	2,458	0	0.99	§					Zero infections	
Legacy Emanuel Medical Center	91,394	42	62.3	0.67	0.49	0.90	Statistically fewer infections	26–50th	✓ Met HHS target	
Legacy Good Samaritan Medical Center	51,413	22	41.0	0.54	0.35	0.80	Statistically fewer infections	26–50th	✓ Met HHS target	
Legacy Meridian Park Medical Center	29,697	8	19.7	0.41	0.19	0.77	Statistically fewer infections	26–50th	✓ Met HHS target	
Legacy Mount Hood Medical Center	22,053	10	13.1	0.77	0.39	1.36	Fewer infections	51–75th		
Lower Umpqua Hospital District	650	0	0.4	§					✓ Zero infections	
McKenzie-Willamette Medical Center	20,686	7	13.1	0.54	0.23	1.06	Fewer infections	26–50th	✓ Met HHS target	
Mercy Medical Center	25,477	7	16.1	0.44	0.19	0.86	Statistically fewer infections	26–50th	✓ Met HHS target	
Mid-Columbia Medical Center	6,543	1	3.1	0.32	0.02	1.59	Fewer infections	11–25th	✓ Met HHS target	
Oregon Health & Science University	149,617	155	107.4	1.44	1.23	1.68	Statistically more infections	91–100th 0% 100%		
Peace Harbor Hospital	4,321	2	2.5	0.82	0.14	2.70	Fewer infections	51–75th		
Pioneer Memorial Hospital - Heppner	756	0	0.3	§					✓ Zero infections	

Table 6. Facility-specific 2014 annual hospital-onset incident *Clostridium difficile* LabID event data for Oregon hospitals: facility-wide (n=61)



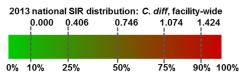
Labib event data for Ore	<u></u>		ndardized infe		atio (SIR)		2014 SIR interpretation and benchmarking			
Hospital name*	Patient days	Observed infections (Obs.)	Predicted infections† (Pred.)	SIR: Obs. ÷ Pred.	Lower 95% CI	Upper 95% CI	Statistical comparison to national baseline (2010–2011)	Percentile range on 2013 national SIR distribution (lower = better) ¶	Benchmarks: met 2013 HHS target (≤0.7) or zero infections**	
Pioneer Memorial Hospital (St. Charles – Prineville)	2,185	0	1.3	0.00	II	2.37	Fewer infections	0–10th	Met HHS target Zero infections	
Providence Hood River Memorial	4,352	0	2.7	0.00	II	1.11	Fewer infections	0–10th	Met HHS target Zero infections	
Providence Medford Medical Center	29,404	13	20.8	0.63	0.35	1.04	Fewer infections	26–50th	✓ Met HHS target	
Providence Milwaukie Hospital	9,202	4	6.1	0.66	0.21	1.58	Fewer infections	26–50th	✓ Met HHS target	
Providence Newberg Medical Center	9,408	0	5.9	0.00	II	0.51	Statistically fewer infections	0–10th	Met HHS target Zero infections	
Providence Portland Medical Center	101,550	37	83.4	0.44	0.32	0.61	Statistically fewer infections	26–50th	✓ Met HHS target	
Providence Seaside Hospital	3,566	3	2.2	1.38	0.35	3.74	More infections	76–90th		
Providence St. Vincent Medical Center	114,517	42	91.9	0.46	0.33	0.61	Statistically fewer infections	26–50th	✓ Met HHS target	
Providence Willamette Falls Medical Center	18,358	7	10.7	0.65	0.29	1.29	Fewer infections	26–50th	✓ Met HHS target	
Sacred Heart Medical Center - Riverbend	106,027	42	69.8	0.60	0.44	0.81	Statistically fewer infections	26–50th	✓ Met HHS target	
Sacred Heart University District	22,266	5	14.1	0.36	0.13	0.79	Statistically fewer infections	11–25th	✓ Met HHS target	
Salem Hospital	93,213	52	69.2	0.75	0.57	0.98	Statistically fewer infections	51–75th		
Samaritan Albany General Hospital	9,900	2	4.8	0.42	0.07	1.37	Fewer infections	26–50th	✓ Met HHS target	
Samaritan Lebanon Community Hospital	5,462	1	3.9	0.26	0.01	1.27	Fewer infections	11–25th	✓ Met HHS target	

Table 6. Facility-specific 2014 annual hospital-onset incident *Clostridium difficile* LabID event data for Oregon hospitals: facility-wide (n=61)



		Star	ndardized infe	ection ra	atio (SIR)		2014 SIR ir	nterpretation and ben	chmarking
Hospital name*	Patient days	Observed infections (Obs.)	Predicted infections† (Pred.)	SIR: Obs. ÷ Pred.	Lower 95% CI	Upper 95% CI	Statistical comparison to national baseline (2010–2011)	Percentile range on 2013 national SIR distribution (lower = better) [¶]	Benchmarks: met 2013 HHS target (≤0.7) or zero infections**
Samaritan North Lincoln Hospital	3,349	0	1.9	0.00	II	1.58	Fewer infections	0–10th	Met HHS target Zero infections
Samaritan Pacific Communities Hospital	4,801	7	2.9	2.41	1.05	4.76	Statistically more infections	91–100th	
Santiam Memorial Hospital	1,638	7	1.1	6.35	2.78	12.57	Statistically more infections	91–100th	
Shriner's	2,348	2	1.2	1.62	0.27	5.35	More infections	91–100th	
Silverton Hospital	8,682	0	3.9	0.00	II	0.77	Statistically fewer infections	0–10th	✓ Zero infections
Sky Lakes Medical Center	19,440	16	14.5	1.11	0.66	1.76	More infections	76–90th	
Southern Coos Hospital and Health Center	1,541	0	‡	‡			‡		‡
St. Alphonsus Medical Center - Baker City	1,947	1	‡	‡			‡		‡
St. Alphonsus Medical Center - Ontario	7,076	1	3.3	0.31	0.02	1.52	Fewer infections	11–25th	✓ Met HHS target
St. Anthony Hospital	4,359	0	1.8	0.00	II	1.65	Fewer infections	0–10th	Met HHS target Zero infections
St. Charles Medical Center - Bend	58,248	29	50.0	0.58	0.40	0.82	Statistically fewer infections	26–50th	✓ Met HHS target
St. Charles Medical Center - Madras	2,567	3	1.5	2.05	0.52	5.58	More infections	91–100th	
St. Charles Medical Center - Redmond	6,572	2	3.9	0.51	0.09	1.68	Fewer infections	26–50th	✓ Met HHS target
Tillamook County Hospital	3,942	1	1.7	0.60	0.03	2.94	Fewer infections	26–50th	✓ Met HHS target

Table 6. Facility-specific 2014 annual hospital-onset incident *Clostridium difficile* LabID event data for Oregon hospitals: facility-wide (n=61)



		Stai	ndardized infe	ection ra	atio (SIR)		2014 SIR ir	nterpretation and ben	chmarking
Hospital name*	Patient days	Observed infections (Obs.)	Predicted infections† (Pred.)	SIR: Obs. ÷ Pred.	Lower 95% CI	Upper 95% CI	Statistical comparison to national baseline (2010–2011)	Percentile range on 2013 national SIR distribution (lower = better) ¶	Benchmarks: met 2013 HHS target (≤0.7) or zero infections**
Tuality Community Hospital	19,829	6	10.9	0.55	0.22	1.15	Fewer infections	26–50th	✓ Met HHS target
Vibra Specialty Hospital of Portland	17,522	19	††	tt			††		tt
Wallowa Memorial Hospital	2,633	3	1.4	2.08	0.53	5.67	More infections	91–100th	
West Valley Hospital	457	0	0.3	§					✓ Zero infections
Willamette Valley Medical Center	13,432	1	9.3	0.11	0.01	0.53	Statistically fewer infections	11–25th	✓ Met HHS target

^{*} All 61 Oregon hospitals reported CDI LabID data

[†] Predicted number of infections based on national CDI LabID data from 2010–2011, adjusted for admission prevalence, testing methods, and other factors (see methods)

[‡] Neither predicted number of infections nor SIRs were generated because hospitals did not submit data to NHSN

[§] SIR is not calculated when the predicted number of infections is <1 per CDC protocols

If the SIR is 0, no lower 95% confidence interval (CI) is reported

[¶] No 2014 national data available at the time of report publication, so 2013 data were used, available here: www.cdc.gov/hai/progress-report/index.html

^{**}The U.S. Department of Health and Human Services (HHS) set a five-year HO-CDI reduction target of 30% (SIR=0.7) in 2009: www.health.gov/hcq/pdfs/HAI-Targets.pdf

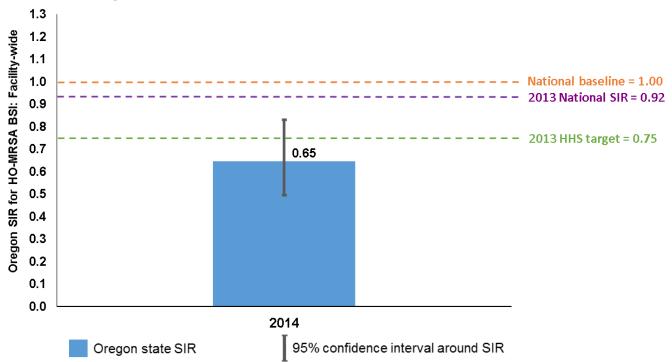
^{††} Neither predicted infections nor SIRs were calculated for long-term acute care hospitals (LTACHs) per CDC protocols; Vibra Specialty Hospital of Portland is Oregon's only LTACH and is licensed as an acute care hospital

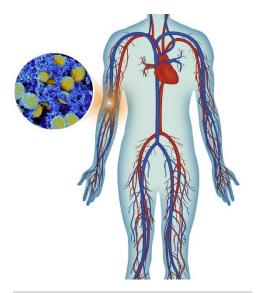
Methicillin-resistant *Staphylococcus aureus* bloodstream infection (MRSA BSI)

A hospital-onset MRSA BSI occurs when antibiotic-resistant bacteria enter the bloodstream through wounds or medical devices during the course of medical treatment. These bacteria are resistant to beta-lactams, which include methicillin and other more common antibiotics such as oxacillin, penicillin and amoxicillin. MRSA can spread in hospitals through contaminated hands and surfaces.

In Oregon, facility-wide MRSA bacteremia identified through laboratory records (LabID events) became reportable through the state's mandatory HAI reporting program starting in 2014. Collectively, Oregon's MRSA BSI SIR was 0.65, meaning hospitals reported 35% fewer infections than expected based on national baselines, and exceeded the 2013 HHS target SIR of 0.75 (Figure 5, green line). When comparing Oregon's 2014 hospital-onset MRSA BSI SIR to the most recent annual SIRs published by CDC (Figure 5, purple line), Oregon's SIR was statistically lower (p=0.0052). To help fight spread of MRSA, in 2014, Oregon's inter-facility transfer communication law took effect, which requires health care facilities to notify receiving facilities of a patient's MRSA status upon transfer.

Figure 5. Aggregate hospital-onset facility-wide MRSA bacteremia identified through laboratory records for Oregon — 2014



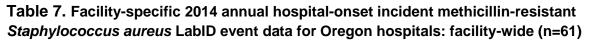


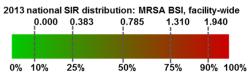
What can providers do to prevent MRSA bacteremia?

- Perform hand hygiene before and after patient care or contact with surfaces in patient care areas
- Carefully clean hospital rooms and medical equipment
- ✓ Use contact precautions when caring for patients with MRSA (gown and gloves)
- Notify receiving facility of a patient's MRSA status upon transfer
- When receiving a patient from another facility, confirm MDRO status

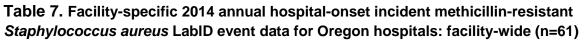
CDC prevention resources:

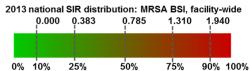
www.cdc.gov/HAI/organisms/mrs a-infection.html





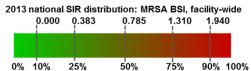
		Star	ndardized infe	ection ra	tio (SIR)		2014 SIR interpretation and benchmarking				
Hospital name*	Patient days	Observed infections (Obs.)	Predicted infections† (Pred.)	SIR: Obs. ÷ Pred.	Lower 95% CI	Upper 95% CI	Statistical comparison to national baseline (2010–2011)	Percentile range on 2013 national SIR distribution (lower = better) ¶	Benchmarks: met 2013 HHS target (≤0.75) or zero infections**		
All Oregon	1,518,974	58	89.7	0.65	0.50	0.83	Statistically fewer infections	See executive summary	✓ Met HHS target		
Adventist Medical Center	48,606	0	2.4	0.00	II	1.28	Fewer infections	0–10th	Met HHS target Zero infections		
Asante Rogue Regional Medical Center	79,236	2	3.6	0.56	0.09	1.85	Fewer infections	26–50th	✓ Met HHS target		
Asante Three Rivers Medical Center	26,982	3	1.2	2.44	0.62	6.65	More infections	91–100th			
Ashland Community Hospital	4,966	0	0.2	§					✓ Zero infections		
Bay Area Hospital	26,362	0	1.1	0.00	II	2.73	Fewer infections	0–10th	Met HHS target Zero infections		
Blue Mountain Hospital	639	0	0.02	§					✓ Zero infections		
Columbia Memorial Hospital	910	0	0.03	§					✓ Zero infections		
Coquille Valley Hospital District	1,904	0	‡	‡			‡		‡		
Cottage Grove Community Hospital	1,553	0	0.1	§					✓ Zero infections		
Curry General Hospital	253	0	0.01	§					✓ Zero infections		
Good Samaritan Regional Medical Center	37,746	2	1.6	1.25	0.21	4.13	More infections	51–75th			
Good Shepherd Medical Center	5,530	0	0.2	§					✓ Zero infections		
Grande Ronde Hospital	5,435	0	0.3	§					✓ Zero infections		





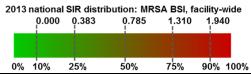
		Star	ndardized infe	-	2014 SIR interpretation and benchmarking				
Hospital name*	Patient days	Observed infections (Obs.)	Predicted infections† (Pred.)	SIR: Obs. ÷ Pred.	Lower 95% CI	Upper 95% CI	Statistical comparison to national baseline (2010–2011)	Percentile range on 2013 national SIR distribution (lower = better)	Benchmarks: met 2013 HHS target (≤0.75) or zero infections**
Harney District Hospital	1,455	0	0.05	§					✓ Zero infections
Kaiser Permanente Sunnyside Medical Center	61,437	3	2.8	1.08	0.27	2.94	More infections	51–75th	
Kaiser Permanente Westside Medical Center	22,779	0	1.0	0.00	II	2.98	Fewer infections	0–10th	Met HHS target Zero infections
Lake District Hospital	2,545	0	0.09	§					✓ Zero infections
Legacy Emanuel Medical Center	104,708	5	9.0	0.55	0.20	1.23	Fewer infections	26–50th	✓ Met HHS target
Legacy Good Samaritan Medical Center	51,413	1	2.1	0.48	0.02	2.35	Fewer infections	26–50th	✓ Met HHS target
Legacy Meridian Park Medical Center	29,697	0	1.2	0.00	II	2.50	Fewer infections	0–10th	Met HHS target Zero infections
Legacy Mount Hood Medical Center	22,519	1	1.3	0.76	0.04	3.75	Fewer infections	26–50th	
Lower Umpqua Hospital District	721	0	0.03	§					✓ Zero infections
McKenzie-Willamette Medical Center	20,686	1	1.4	0.72	0.04	3.57	Fewer infections	26–50th	✓ Met HHS target
Mercy Medical Center	27,168	2	1.4	1.45	0.24	4.78	More infections	76–90th	
Mid-Columbia Medical Center	7,114	1	0.3	§					
Oregon Health & Science University	162,276	12	15.9	0.75	0.41	1.28	Fewer infections	26–50th	✓ Met HHS target
Peace Harbor Hospital	4,349	0	0.2	§					✓ Zero infections

Table 7. Facility-specific 2014 annual hospital-onset incident methicillin-resistant *Staphylococcus aureus* LabID event data for Oregon hospitals: facility-wide (n=61)



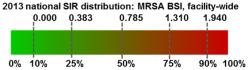
		Star	ndardized infe	ection ra	atio (SIR)		2014 SIR interpretation and benchmarking				
Hospital name*	Patient days	Observed infections (Obs.)	Predicted infections† (Pred.)	SIR: Obs. ÷ Pred.	Lower 95% CI	Upper 95% CI	Statistical comparison to national baseline (2010–2011)	Percentile range on 2013 national SIR distribution (lower = better) ¶	Benchmarks: met 2013 HHS target (≤0.75) or zero infections**		
Pioneer Memorial Hospital - Heppner	756	0	0.04	§					✓ Zero infections		
Pioneer Memorial Hospital (St. Charles – Prineville)	2,185	0	0.1	§					✓ Zero infections		
Providence Hood River Memorial Hospital	5,160	0	0.2	§					✓ Zero infections		
Providence Medford Medical Center	30,399	3	1.5	1.97	0.50	5.35	More infections	91–100th			
Providence Milwaukie Hospital	9,202	1	0.4	§							
Providence Newberg Medical Center	10,565	0	0.4	§					✓ Zero infections		
Providence Portland Medical Center	107,548	0	7.3	0.00	II	0.41	Statistically fewer infections	0–10th	Met HHS target Zero infections		
Providence Seaside Hospital	3,781	0	0.2	§					✓ Zero infections		
Providence St. Vincent Medical Center	135,049	4	8.4	0.48	0.15	1.15	Fewer infections	26–50th	✓ Met HHS target		
Providence Willamette Falls Medical Center	20,524	0	0.8	§					✓ Zero infections		
Sacred Heart Medical Center - Riverbend	119,610	5	5.5	0.91	0.33	2.01	Fewer infections	51–75th			
Sacred Heart University District	22,266	0	1.2	0.00	II	2.44	Fewer infections	0–10th	Met HHS target Zero infections		
Salem Hospital	103,342	6	7.7	0.78	0.32	1.63	Fewer infections	26–50th			
Samaritan Albany General Hospital	10,137	0	0.5	§					✓ Zero infections		

Table 7. Facility-specific 2014 annual hospital-onset incident methicillin-resistant *Staphylococcus aureus* LabID event data for Oregon hospitals: facility-wide (n=61)



		Star	ndardized infe	ection ra	atio (SIR)		2014 SIR ir	ison to on 2013 national met 2013 HHS paseline SIR distribution target (≤0.75) or		
Hospital name*	Patient days	Observed infections (Obs.)	Predicted infections† (Pred.)	SIR: Obs. ÷ Pred.	Lower 95% CI	Upper 95% CI	Statistical comparison to national baseline (2010–2011)	on 2013 national SIR distribution	met 2013 HHS target (≤0.75) or	
Samaritan Lebanon Community Hospital	5,974	1	0.3	§						
Samaritan North Lincoln Hospital	3,359	0	0.1	8					✓ Zero infections	
Samaritan Pacific Communities Hospital	5,265	0	0.3	§					✓ Zero infections	
Santiam Memorial Hospital	3,574	1	0.1	§						
Shriner's	2,348	0	0.1	§					✓ Zero infections	
Silverton Hospital	8,682	0	0.4	§					✓ Zero infections	
Sky Lakes Medical Center	20,904	2	0.8	§						
Southern Coos Hospital and Health Center	1,541	0	‡	‡			‡		‡	
St. Alphonsus Medical Center - Baker City	1,947	0	‡	‡			‡		‡	
St. Alphonsus Medical Center - Ontario	8,008	0	0.3	§					✓ Zero infections	
St. Anthony Hospital	4,979	1	0.2	§						
St. Charles Medical Center - Bend	63,680	0	2.6	0.00	II	1.14	Fewer infections	0–10th	Met HHS target Zero infections	
St. Charles Medical Center - Madras	2,882	0	0.1	§					✓ Zero infections	
St. Charles Medical Center - Redmond	7,301	0	0.3	§					✓ Zero infections	
Tillamook County Hospital	4,296	0	0.2	§					✓ Zero infections	

Table 7. Facility-specific 2014 annual hospital-onset incident methicillin-resistant Staphylococcus aureus LabID event data for Oregon hospitals: facility-wide (n=61)



		Star	ndardized infe	ection ra	atio (SIR)		2014 SIR ir	nterpretation and bendaria	chmarking
Hospital name*	Patient days	Observed infections (Obs.)	Predicted infections† (Pred.)	SIR: Obs. ÷ Pred.	Lower 95% CI	Upper 95% CI	Statistical comparison to national baseline (2010–2011)	Percentile range on 2013 national SIR distribution (lower = better) ¶	Benchmarks: met 2013 HHS target (≤0.75) or zero infections**
Tuality Community Hospital	19,829	0	1.1	0.00	II	2.83	Fewer infections	0–10th	Met HHS target Zero infections
Vibra Specialty Hospital of Portland	17,522	3	††	tt			††		††
Wallowa Memorial Hospital	2,723	0	0.1	§					Zero infections
West Valley Hospital	359	0	0.01	§					✓ Zero infections
Willamette Valley Medical Center	14,400	1	0.9	§					

^{*} All 61 Oregon hospitals reported MRSA bacteremia data

[†] Predicted number of infections based on national MRSA bacteremia LabID data from 2010–2011, adjusted for admission prevalence, testing methods, and other factors (see methods)

[‡] Neither predicted number of infections nor SIRs were generated because hospitals did not submit data to NHSN

[§] SIR is not calculated when the predicted number of infections is <1 per CDC protocols

^{||} If the SIR is 0, no lower 95% confidence interval (CI) is reported

^{**}The U.S. Department of Health and Human Services (HHS) set a five-year HO-MRSA bacteremia reduction target of 25% (SIR=0.75) in 2009: www.health.gov/hcg/pdfs/HAI-Targets.pdf

[¶] No 2014 national data available at the time of report publication, so 2013 data were used, available here: www.cdc.gov/hai/progress-report/index.html

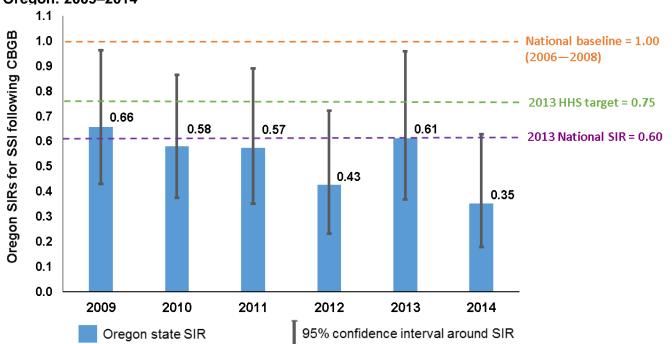
^{††} Neither predicted infections nor SIRs were calculated for long-term acute care hospitals (LTACHs) per CDC protocols; Vibra Specialty Hospital of Portland is Oregon's only LTACH and is licensed as an acute care hospital

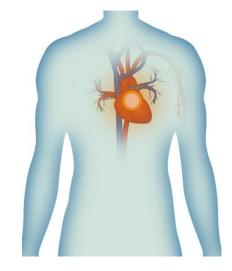
Surgical site infection (SSI) following coronary artery bypass graft surgery with both chest and donor site incisions (CBGB)

Surgical site infections (SSIs) occur in 2–5% of patients undergoing inpatient surgery, leading to increased morbidity, mortality and length of stay. ¹⁰ These infections can affect superficial skin and tissue layers as well as deep-incisional and organ space areas. Standardized infection ratios (SIRs) reported on this page and in the following table are for deep-incisional and organ space SSIs only, due to the inconsistency in reporting of superficial SSIs.

In Oregon, SSIs following CBGB surgeries have been reportable since 2009. In 2014, Oregon hospitals had an SIR of 0.35, meaning they reported 65% fewer infections than would be predicted based on riskadjusted national baselines, and collectively exceeded the 2013 HHS target SIR of 0.75 (Figure 6, green line). When comparing Oregon's 2014 CBGB SSI SIR to the most recent annual SIRs published by CDC (Figure 6, purple line), Oregon's SIR was lower than the nation, though, with a p-value of 0.08, the result was not statistically lower by the standard cut-off of p <0.05.

Figure 6. Aggregate SIRs for SSI following coronary artery bypass graft (CBGB) surgery for Oregon: 2009–2014



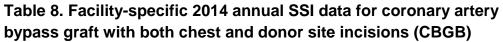


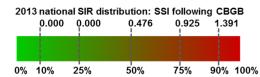
What can providers do to prevent CBGB surgical site infections?

- ✓ Clean hands and arms up to elbows with an antiseptic agent before surgery
- ✓ Perform vigilant hand hygiene during post-operative care
- ✓ Remove hair immediately before surgery using electric clippers (not a razor)
- ✓ Wear sterile barriers during surgery and minimize entry/exit
- Provide appropriate antibiotics within 60 minutes before the surgery starts and discontinue within 24 hours after surgery

CDC prevention resources:

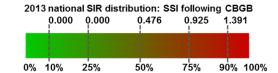
www.cdc.gov/HAI/ssi/ssi.html#rphp





bypass graft with			dardized infe		• ,		0% 10% 25% 50% 75% 90% 100% 2014 SIR interpretation and benchmarking				
Hospital name*	Total proce- dures	Observed infections (Obs.)	Predicted infections† (Pred.)	SIR: Obs. ÷ Pred.	Lower 95% CI	Upper 95% CI	Statistical comparison to national baseline (2006–2008)	Percentile range on 2013 national SIR distribution (lower = better) ¶	Benchmarks: met 2013 HHS target (≤0.75) or zero infections**		
All Oregon	2,413	10	28.4	0.35	0.18	0.63	Statistically fewer infections	See executive summary	✓ Met HHS target		
Adventist Medical Center	73	0	1.0	0.00	II	2.91	Fewer infections	0-25th	Met HHS target Zero infections		
Asante Rogue Regional Medical Center	381	2	3.2	0.63	0.11	2.09	Fewer infections	51–75th	✓ Met HHS target		
Good Samaritan Regional Medical Center	133	0	1.8	0.00	II	1.64	Fewer infections	0-25th	Met HHS target Zero infections		
Kaiser Permanente Sunnyside Medical Center	229	1	3.3	0.31	0.02	1.51	Fewer infections	26–50th	✓ Met HHS target		
Legacy Emanuel Medical Center	59	0	0.8	§					✓ Zero infections		
Legacy Good Samaritan Medical Center	124	0	1.7	0.00	II	1.78	Fewer infections	0-25th	Met HHS target Zero infections		
McKenzie-Willamette Medical Center	71	0	0.9	§					✓ Zero infections		
Oregon Health & Science University	235	3	2.8	1.07	0.27	2.90	More infections	76–90th			
Providence Portland Medical Center	141	1	1.7	0.60	0.03	2.96	Fewer infections	51–75th	✓ Met HHS target		
Providence St. Vincent Medical Center	311	2	4.0	0.50	0.08	1.65	Fewer infections	51–75th	✓ Met HHS target		
Sacred Heart Medical Center - Riverbend	247	0	2.6	0.00	II	1.13	Fewer infections	0-25th	Met HHS target Zero infections		
Salem Hospital	245	1	2.8	0.36	0.02	1.80	Fewer infections	26–50th	✓ Met HHS target		
St. Charles Medical Center - Bend	133	0	1.5	0.00	II	2.07	Fewer infections	0-25th	Met HHS target Zero infections		
Tuality Community Hospital	31	0	0.4	§					✓ Zero infections		

Table 8. Facility-specific 2014 annual SSI data for coronary artery bypass graft with both chest and donor site incisions (CBGB)



- * 14 hospitals reported CBGB infections in 2014; 47 hospitals performing <20 procedures annually applied for exemption from reporting
- ‡ Only deep incisional /organ space SSIs were included in the SIR calculations due to variation in surveillance techniques for superficial infections per CDC protocol
- † Predicted number of infections based on national CBGB SSI data from 2006–2008, adjusted for individual patient risk factors (see methods)
- § SIR is not calculated when the predicted number of infections is <1 per CDC protocols
- || If the SIR is 0, no lower 95% confidence interval (CI) is reported
- ¶ No 2014 national data available at the time of report publication, so 2013 data were used, available here: www.cdc.gov/hai/progress-report/index.html
- ** The U.S. Department of Health and Human Services (HHS) set a five-year SSI CBGB reduction target of 25% (SIR=0.75) in 2009: www.health.gov/hcg/pdfs/HAI-Targets.pdf

Surgical site infection (SSI) following laminectomy (LAM)

Surgical site infections (SSIs) occur in 2–5% of patients undergoing inpatient surgery and lead to increased morbidity, mortality and length of stay. ¹⁰ These infections can affect the superficial skin and tissue layers as well as deep-incisional and organ space areas. Standardized infection ratios (SIRs) reported on this page and in the following table are for deep-incisional and organ space SSIs only, due to the inconsistency in reporting of superficial SSIs. A LAM SSI is an infection at the surgical site of a laminectomy, which is a type of back surgery.

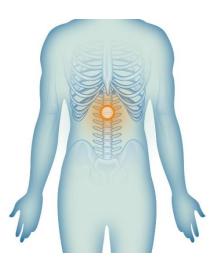
In Oregon, SSIs following laminectomy surgery have been reportable through the state's mandatory HAI reporting program since 2011. No annual national SSI SIRs for laminectomy have been published by CDC for statistical comparison. Hospitals in Oregon collectively reported an SIR of 0.53, meaning they reported 47% fewer infections than predicted based on national risk-adjusted baselines, and exceeded the 2013 HHS target SIR of 0.75 (Figure 7, green line).

Dregon SIRs for SSI following LAM 1.1 National baseline = 1.00 1.0 (2006 - 2008)0.9 0.84 0.8 2013 HHS target = 0.75 0.7 0.61 0.61 0.6 0.53 0.5 0.4 0.3 0.2 0.1 0.0 2011 2012 2013 2014

Oregon state SIR

95% confidence interval around SIR

Figure 7. Aggregate SIRs for SSI following laminectomy (LAM) surgery for Oregon: 2011–2014



What can providers do to prevent LAM surgical site infections?

- Clean hands and arms up to elbows with an antiseptic agent before surgery
- ✓ Perform vigilant hand hygiene during post-operative care
- Remove hair immediately before surgery using electric clippers (not a razor)
- ✓ Wear sterile barriers during surgery and minimize entry/exit
- Provide appropriate antibiotics within 60 minutes before the surgery starts and discontinue within 24 hours after surgery

CDC prevention resources:

www.cdc.gov/HAI/ssi/ssi.html#rphp

Table 9. Facility-specific 2014 annual SSI data laminectomy (LAM)

		Star	dardized infect	ion ratio	o (SIR)‡		2014 SIR interpretation and benchmarking			
Hospital name∗	Total proce- dures	Observed infections (Obs.)	Predicted infections† (Pred.)	SIR: Obs. ÷ Pred.	Lower 95% CI	Upper 95% CI	Statistical comparison to national baseline (2006–2008)¶	Benchmarks: met 2013 HHS target (≤0.75) or zero infections**		
All Oregon	9,120	29	55.1	0.53	0.36	0.75	See executive summary	✓ Met HHS target		
Adventist Medical Center	434	0	1.2	0.00	II	2.43	Fewer infections	Met HHS target Zero infections		
Asante Rogue Regional Medical Center	359	0	2.5	0.00	II	1.21	Fewer infections	Met HHS target Zero infections		
Ashland Community Hospital	40	0	0.2	§				✓ Zero infections		
Bay Area Hospital	54	0	0.2	§				✓ Zero infections		
Good Samaritan Regional Medical Center	222	1	0.8	§						
Kaiser Permanente Sunnyside Medical Center	797	4	2.3	1.73	0.55	4.18	More infections			
Legacy Emanuel Medical Center	270	1	1.4	0.71	0.04	3.52	Fewer infections	✓ Met HHS target		
Legacy Good Samaritan Medical Center	307	1	0.9	§						
Legacy Meridian Park Medical Center	470	3	2.7	1.11	0.28	3.01	More infections			
Legacy Mount Hood Medical Center	207	0	1.8	0.00	II	1.69	Fewer infections	Met HHS target Zero infections		
McKenzie-Willamette Medical Center	293	1	2.6	0.38	0.02	1.88	Fewer infections	✓ Met HHS target		
Mercy Medical Center	25	1	0.3	§						
Oregon Health & Science University	799	1	6.5	0.15	0.01	0.76	Statistically fewer infections	✓ Met HHS target		
Providence Medford Medical Center	318	1	2.3	0.44	0.02	2.15	Fewer infections	✓ Met HHS target		

		Stan	dardized infect	ion ratio	o (SIR)‡		2014 SIR interpretation	n and benchmarking
Hospital name∗	Total proce- dures	Observed infections (Obs.)	Predicted infections [†] (Pred.)	SIR: Obs. ÷ Pred.	Lower 95% CI	Upper 95% CI	Statistical comparison to national baseline (2006–2008)¶	Benchmarks: met 2013 HHS target (≤0.75) or zero infections**
Providence Portland Medical Center	733	2	5.3	0.38	0.06	1.24	Fewer infections	✓ Met HHS target
Providence St. Vincent Medical Center	684	3	5.4	0.56	0.14	1.52	Fewer infections	✓ Met HHS target
Providence Willamette Falls Medical Center	116	0	0.8	§				✓ Zero infections
Sacred Heart Medical Center - Riverbend	1,206	5	9.3	0.54	0.20	1.19	Fewer infections	✓ Met HHS target
Salem Hospital	388	0	3.6	0.00	II	0.83	Statistically fewer infections	Met HHS target Zero infections
Sky Lakes Medical Center	164	1	0.5	§				
St. Charles Medical Center - Bend	1,061	5	3.2	1.58	0.58	3.50	More infections	
Tuality Community Hospital	168	0	1.3	0.00	II	2.27	Fewer infections	Met HHS target Zero infections

^{* 22} hospitals listed for SSIs following LAM in 2014 listed; 39 hospitals performing <20 LAM procedures annually applied for exemption from reporting ‡ Only deep incisional /organ space SSIs were included in the SIR calculations due to variation in surveillance techniques for superficial infections, per CDC protocol † Predicted number of infections based on national LAM SSI data from 2006–2008, adjusted for individual patient risk factors (see methods)

[§] SIR is not calculated when the predicted number of infections is <1 per CDC protocols

^{||} If the SIR is 0, no lower 95% confidence interval (CI) is reported

^{**} SIR for 2013 was 0, so not possible to calculate a % change

Surgical site infection (SSI) following colon (COLO) surgery

Surgical site infections (SSIs) occur in 2–5% of patients undergoing inpatient surgery and lead to increased morbidity, mortality and length of stay. ¹⁰ These infections can affect the superficial skin and tissue layers as well as deep-incisional and organ space areas. Standardized infection ratios (SIRs) reported on this page and in the following table are for deep-incisional and organ space SSIs only, due to the inconsistency in reporting of superficial SSIs. A COLO SSI can occur following colon surgery.

In Oregon, SSIs following colon surgery have been reportable through the state's mandatory HAI reporting program since 2011. In 2014, The Oregon hospitals reported a COLO SIR of 0.85, which was statistically equivalent to risk-adjusted national baselines, and hospitals did not meet the 2013 HHS target SIR of 0.75 (Figure 8, green line). When comparing Oregon's 2014 COLO SSI SIR to the most recent annual SIRs published by CDC (Figure 8, purple line), Oregon's SIR was slightly lower, and but statistically equal to the nation (p=0.47).

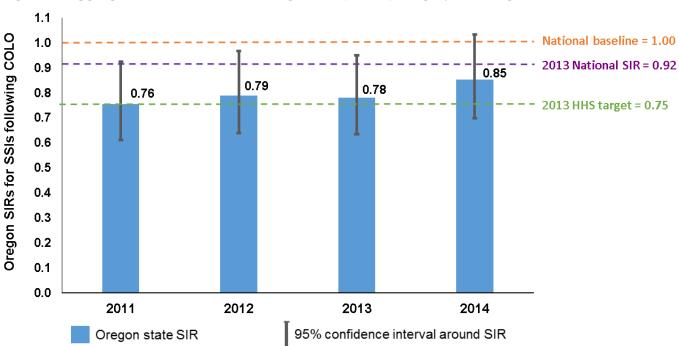
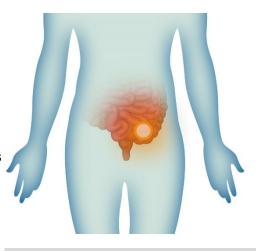


Figure 8. Aggregate SIRs for SSI following colon (COLO) surgery for Oregon: 2011–2014



What can providers do to prevent surgical site infections following colon surgeries?

- Clean hands and arms up to elbows with an antiseptic agent before surgery
- ✓ Perform vigilant hand hygiene during post-operative care
- ✓ Remove hair immediately before surgery using electric clippers (not a razor)
- ✓ Wear sterile barriers during surgery and minimize entry/exit
- ✓ Provide appropriate antibiotics within 60 minutes before the surgery starts and discontinue within 24 hours after surgery

CDC prevention resources:

Table 10. Facility-specific 2014 annual colon surgeries (COLO)

	-	Stane	dardized infec	tion rati	, (SID) ±		0% 10% 25% 50% 75% 90% 100% 2014 SIR interpretation and benchmarking			
Hospital name∗	Total proce- dures	Observed infections (Obs.)	Predicted infections† (Pred.)	SIR: Obs. ÷ Pred.	Lower 95% CI	Upper 95% CI	Statistical comparison to national baseline (2006–2008)	Percentile range on 2013 national SIR distribution (lower = better)	Benchmarks: met 2013 HHS target (≤0.75) or zero infections**	
All Oregon	3886	101	118.3	0.85	0.70	1.03	Fewer infections	See executive summary		
Adventist Medical Center	106	0	2.5	0.00	II	1.22	Fewer infections	0–10th	Met HHS target Zero infections	
Asante Rogue Regional Medical Center	208	4	6.0	0.67	0.21	1.62	Fewer infections	26–50th	✓ Met HHS target	
Asante Three Rivers Medical Center	128	4	3.2	1.25	0.40	3.02	More infections	51–75th 0% 100%		
Ashland Community Hospital	22	2	0.6	§						
Bay Area Hospital	57	1	1.2	0.83	0.04	4.09	Fewer infections	51–75th 0% 100%		
Good Samaritan Regional Medical Center	108	2	2.8	0.71	0.12	2.33	Fewer infections	26–50th	✓ Met HHS target	
Good Shepherd Medical Center	11	0	0.3	§					✓ Zero infections	
Grande Ronde Hospital	15	0	0.3	§					✓ Zero infections	
Kaiser Permanente Sunnyside Medical Center	252	6	7.1	0.85	0.34	1.76	Fewer infections	51–75th		
Kaiser Permanente Westside Medical Center	75	3	2.0	1.47	0.37	4.00	More infections	76–90th		
Legacy Emanuel Medical Center	79	5	2.9	1.75	0.64	3.87	More infections	76–90th		
Legacy Good Samaritan Medical Center	154	6	5.6	1.07	0.44	2.23	More infections	51–75th		
Legacy Meridian Park Medical Center	110	2	2.8	0.72	0.12	2.36	Fewer infections	26–50th	✓ Met HHS target	
Legacy Mount Hood Medical Center	79	6	2.3	2.58	1.05	5.36	Statistically more infections	91–100th		

2013 national SIR distribution: SSI following COLO 0.000 0.315 0.745 1.301 1.921 0% 10% 25% 50% 75% 90% 100%

Table 10. Facility-specific 2014 annual colon surgeries (COLO)

, 	-	Stone	dardized infed	tion rot	, (SID) †		0% 10% 25% 50% 75% 90% 100% 2014 SIR interpretation and benchmarking			
Hospital name∗	Total proce- dures	Observed infections (Obs.)	Predicted infections [†] (Pred.)	SIR: Obs. ÷ Pred.	Lower 95% CI	Upper 95% CI	Statistical comparison to national baseline (2006–2008)	Percentile range on 2013 national SIR distribution (lower = better) ¶	Benchmarks: met 2013 HHS target (≤0.75) or zero infections**	
McKenzie-Willamette Medical Center	106	1	3.3	0.31	0.02	1.52	Fewer infections	11–25th	✓ Met HHS target	
Mercy Medical Center	57	1	1.5	0.66	0.03	3.23	Fewer infections	26–50th	✓ Met HHS target	
Mid-Columbia Medical Center	35	0	0.96	§					✓ Zero infections	
Oregon Health & Science University	335	12	12.6	0.96	0.52	1.63	Fewer infections	51–75th 0% 100%		
Peace Harbor Hospital	10	0	0.3	§					✓ Zero infections	
Providence Hood River Memorial	21	0	0.5	§					✓ Zero infections	
Providence Medford Medical Center	57	2	1.7	1.18	0.20	3.90	More infections	51–75th		
Providence Milwaukie Hospital	33	0	0.8	§					✓ Zero infections	
Providence Newberg Medical Center	46	1	1.3	0.80	0.04	3.95	Fewer infections	51–75th 0% 100%		
Providence Portland Medical Center	342	11	11.0	1.00	0.52	1.73	Fewer infections	51–75th		
Providence St. Vincent Medical Center	335	6	9.4	0.64	0.26	1.33	Fewer infections	26–50th	✓ Met HHS target	
Providence Willamette Falls Medical Center	34	0	0.9	§					✓ Zero infections	
Sacred Heart Medical Center - Riverbend	319	10	11.1	0.90	0.46	1.61	Fewer infections	51–75th 0% 100%		
Salem Hospital	220	1	9.3	0.11	0.01	0.53	Statistically fewer infections	11–25th	✓ Met HHS target	
Samaritan Albany General Hospital	35	2	0.97	§						

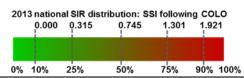


Table 10. Facility-specific 2014 annual colon surgeries (COLO)

		Stand	dardized infec	tion rat	io (SIR)‡		2014 SIR interpretation and benchmarking			
Hospital name*	Total proce- dures	Observed infections (Obs.)	Predicted infections† (Pred.)	SIR: Obs. ÷ Pred.	Lower 95% CI	Upper 95% CI	Statistical comparison to national baseline (2006–2008)	Percentile range on 2013 national SIR distribution (lower = better) ¶	Benchmarks: met 2013 HHS target (≤0.75) or zero infections**	
Samaritan Lebanon Community	14	0	0.4	§					✓ Zero infections	
Samaritan Pacific Communities	22	0	0.6	§					✓ Zero infections	
Santiam Memorial Hospital	12	0	0.4	§					✓ Zero infections	
Silverton Hospital	32	1	0.8	§						
Sky Lakes Medical Center	27	1	0.7	§						
St. Alphonsus Medical Center - Ontario	32	0	0.8	§					✓ Zero infections	
St. Anthony Hospital	27	0	0.9	§					✓ Zero infections	
St. Charles Medical Center - Bend	155	6	4.2	1.43	0.58	2.98	More infections	76–90th		
St. Charles Medical Center - Redmond	52	0	1.3	0.00	II	2.28	Fewer infections	0–10th	Met HHS target Zero infections	
Tillamook County Hospital	14	0	0.4	§					Zero infections	
Tuality Community Hospital	33	2	0.8	§						
Willamette Valley Medical Center	50	2	1.2	1.65	0.28	5.44	More infections	76–90th		

^{* 41} hospitals reported COLO infections in 2014; 20 hospitals performing <20 procedures annually applied for exemption from reporting

[‡] Only deep incisional /organ space SSIs were included in the SIR calculations due to variation in surveillance techniques for superficial infections per CDC protocol

[†] Predicted number of infections based on national COLO SSI data from 2006–2008, adjusted for individual patient risk factors (see methods)

[§] SIR is not calculated when the predicted number of infections is <1 per CDC protocols

If the SIR is 0, no lower 95% confidence interval (CI) is reported

[¶] No 2014 national data available at the time of report publication, so 2013 data were used, available here: www.cdc.gov/hai/progress-report/index.html

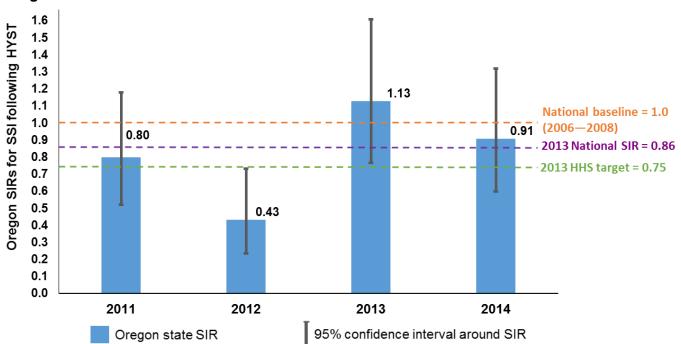
^{**}The U.S. Department of Health and Human Services (HHS) set a five-year SSI COLO reduction target of 25% (SIR=0.75) in 2009: www.health.gov/hcg/pdfs/HAI-Targets.pdf

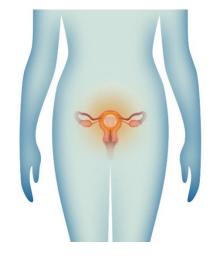
Surgical site infection (SSI) following abdominal hysterectomy (HYST)

Surgical site infections (SSIs) occur in 2–5% of patients undergoing inpatient surgery and lead to increased morbidity, mortality and length of stay. ¹⁰ These infections can affect the superficial skin and tissue layers as well as deep-incisional and organ space areas. Standardized infection ratios (SIRs) reported on this page and in the following table are for deep-incisional and organ space SSIs only, due to the inconsistency in reporting of superficial SSIs. A HYST SSI can occur following abdominal hysterectomy surgery.

In Oregon, SSIs following abdominal hysterectomy surgery have been reportable through the state's mandatory HAI reporting program since 2011. In 2014, Oregon hospitals reported an SIR of 0.91, which was statistically equivalent to national baselines, and did not meet the 2013 HHS target SIR of 0.75 for HYST SSIs (Figure 9, green line). When comparing Oregon's 2014 HYST SSI SIR to the most recent annual SIRs published by CDC (Figure 9, purple line), Oregon's SIR was slightly higher but was statistically equal to the nation (p=0.78).

Figure 9. Aggregate SIRs for SSI following abdominal hysterectomy (HYST) surgery for Oregon: 2011–2014





What can providers do to prevent surgical site infections?

- Clean hands and arms up to elbows with an antiseptic agent before surgery
- ✓ Perform vigilant hand hygiene during post-operative care
- Remove hair immediately before surgery using electric clippers (not a razor)
- ✓ Wear sterile barriers during surgery and minimize entry/exit
- Provide appropriate antibiotics within 60 minutes before the surgery starts and discontinue within 24 hours after surgery

CDC prevention resources:

Table 11. Facility-specific 2014 annual SSI data for abdominal hysterectomy (HYST)

	-	Star	ndardized infe	ction ra	tio (SIR)	‡	2014 SIR interpretation and benchmarking			
Hospital name*	Total proce- dures	Observed infections (Obs.)	Predicted infections† (Pred.)	SIR: Obs. ÷ Pred.	Lower 95% CI	Upper 95% CI	Statistical comparison to national baseline (2006–2008)	Percentile range on 2013 national SIR distribution (lower = better) ¶	Benchmarks: met 2013 HHS target (≤0.75) or zero infections**	
All Oregon	3,329	25	27.6	0.91	0.60	1.32	Fewer infections	See executive summary		
Adventist Medical Center	126	1	0.97	§						
Asante Rogue Regional Medical Center	96	0	0.6	§					✓ Zero infections	
Asante Three Rivers Medical Center	9	1	0.06	§						
Bay Area Hospital	29	0	0.2	§					✓ Zero infections	
Columbia Memorial Hospital	17	0	0.1	§					✓ Zero infections	
Good Samaritan Regional Medical Center	79	0	0.7	§					✓ Zero infections	
Grande Ronde Hospital	15	0	0.1	§					✓ Zero infections	
Kaiser Permanente Sunnyside Medical Center	367	7	3.3	2.14	0.93	4.22	More infections	91–100th		
Kaiser Permanente Westside Medical Center	146	1	1.2	0.81	0.04	4.01	Fewer infections	51–75th		
Legacy Emanuel Medical Center	85	1	0.9	§						
Legacy Good Samaritan Medical Center	210	1	1.9	0.52	0.03	2.57	Fewer infections	26–50th	✓ Met HHS target	
Legacy Meridian Park Medical Center	66	1	0.5	§						
Legacy Mount Hood Medical Center	54	0	0.7	§					✓ Zero infections	
McKenzie-Willamette Medical Center	32	0	0.3	§					✓ Zero infections	

Table 11. Facility-specific 2014 annual SSI data for abdominal hysterectomy (HYST)

		Star	ndardized infe	ction ra	tio (SIR)	‡	2014 SIR interpretation and benchmarking			
Hospital name*	Total proce- dures	Observed infections (Obs.)	Predicted infections† (Pred.)	SIR: Obs. ÷ Pred.	Lower 95% CI	Upper 95% CI	Statistical comparison to national baseline (2006–2008)	Percentile range on 2013 national SIR distribution (lower = better)	Benchmarks: met 2013 HHS target (≤0.75) or zero infections**	
Mercy Medical Center	25	0	0.2	§					✓ Zero infections	
Oregon Health & Science University	207	4	1.8	2.22	0.70	5.35	More infections	91–100th		
Providence Hood River Memorial	10	0	0.09	§					✓ Zero infections	
Providence Medford Medical Center	73	1	0.6	§						
Providence Milwaukie Hospital	7	0	0.04	§					✓ Zero infections	
Providence Newberg Medical Center	19	0	0.1	§					✓ Zero infections	
Providence Portland Medical Center	274	3	1.8	1.70	0.43	4.61	More infections	76–90th		
Providence St. Vincent Medical Center	341	1	2.4	0.41	0.02	2.03	Fewer infections	26–50th	✓ Met HHS target	
Providence Willamette Falls Medical Center	26	0	0.2	§					✓ Zero infections	
Sacred Heart Medical Center - Riverbend	431	3	4.1	0.73	0.19	2.00	Fewer infections	51–75th	✓ Met HHS target	
Salem Hospital	70	0	0.7	§					✓ Zero infections	
Samaritan Albany General Hospital	7	0	0.05	§					✓ Zero infections	
Samaritan Lebanon Community Hospital	21	0	0.2	§					✓ Zero infections	
Samaritan Pacific Communities Hospital	6	0	0.06	§					✓ Zero infections	
Silverton Hospital	37	0	0.3	§					✓ Zero infections	

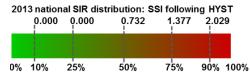


Table 11. Facility-specific 2014 annual SSI data for abdominal hysterectomy (HYST)

		Stan	dardized infe	ction ra	tio (SIR)	‡	2014 SIR interpretation and benchmarking			
Hospital name∗	Total proce- dures	Observed infections (Obs.)	Predicted infections† (Pred.)	SIR: Obs. ÷ Pred.	Lower 95% CI	Upper 95% CI	Statistical comparison to national baseline (2006–2008)	Percentile range on 2013 national SIR distribution (lower = better) [¶]	Benchmarks: met 2013 HHS target (≤0.75) or zero infections**	
Sky Lakes Medical Center	87	0	0.7	§					✓ Zero infections	
St. Alphonsus Medical Center - Ontario	84	0	0.7	§					✓ Zero infections	
St. Charles Medical Center - Bend	164	0	1.1	0.00	II	2.83	Fewer infections	0-25th	Met HHS target Zero infections	
St. Charles Medical Center - Redmond	43	0	0.4	§					✓ Zero infections	
Tillamook County Hospital	3	0	0.03	§					✓ Zero infections	
Tuality Community Hospital	20	0	0.2	§					✓ Zero infections	

^{* 35} hospitals reported SSIs following HYST in 2014; 26 hospitals performing <20 procedures annually applied for exemption from reporting

[‡] Only deep incisional /organ space SSIs were included in the SIR calculations due to variation in surveillance techniques for superficial infections, per CDC protocol

[†] Predicted number of infections based on national HYST SSI data from 2006–2008, adjusted for individual patient risk factors (see methods)

[§] SIR is not calculated when the predicted number of infections is <1 per CDC protocols

^{||} If the SIR is 0, no lower 95% confidence interval (CI) is reported

[¶] No 2014 national data available at the time of report publication, so 2013 data were used, available here: www.cdc.gov/hai/progress-report/index.html

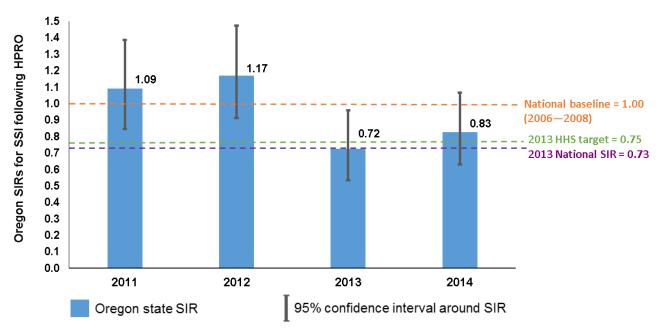
^{**}The U.S. Department of Health and Human Services (HHS) set a five-year SSI HYST reduction target of 25% (SIR=0.75) in 2009: www.health.gov/hcg/pdfs/HAI-Targets.pdf

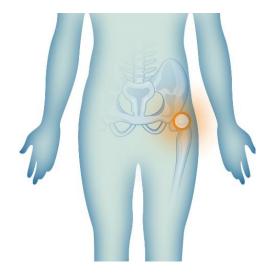
Surgical site infection (SSI) following hip replacement surgery (HPRO)

Surgical site infections (SSIs) occur in 2–5% of patients undergoing inpatient surgery and lead to increased morbidity, mortality and length of stay. ¹⁰ These infections can affect the superficial skin and tissue layers as well as deep-incisional and organ space areas. Standardized infection ratios (SIRs) reported on this page and in the following table are for deep-incisional and organ space SSIs only, due to the inconsistency in reporting of superficial SSIs. An HPRO SSI can occur following hip prosthesis surgery. These infections can result in complete removal or revision of prostheses.

In Oregon, SSIs following HPRO procedures have been reportable through the state's mandatory HAI reporting program since 2011. In 2014, Oregon hospitals reported an SIR of 0.83, which was statistically equivalent to risk-adjusted national baselines, and did not meet the 2013 HHS target SIR of 0.75 (Figure 10, green line). When comparing Oregon's 2014 HPRO SSI SIR to the most recent annual SIRs published by CDC (Figure 10, purple line), Oregon's SIR is higher but statistically equal to the nation (p=0.38).

Figure 10. Aggregate SIRs for SSI following hip prosthesis (HPRO) surgery for Oregon: 2011–2014





What can providers do to prevent surgical site infections?

- Clean hands and arms up to elbows with an antiseptic agent before surgery
- ✓ Perform vigilant hand hygiene during post-operative care
- ✓ Remove hair immediately before surgery using electric clippers (not a razor)
- ✓ Wear sterile barriers during surgery and minimize entry/exit
- ✓ Provide appropriate antibiotics within 60 minutes before the surgery starts and discontinue within 24 hours after surgery

CDC prevention resources:

2013 national SIR distribution: SSI following HPRO
0.000 0.000 0.579 0.977 1.608

0% 10% 25% 50% 75% 90% 100%

Table 12. Facility-specific 2014 annual SSI data for hip prostheses (HPRO)

		Standardized infection ratio (SIR) [‡]					2014 SIR interpretation and benchmarking			
Hospital name*	Total proce- dures	Observed infections (Obs.)	Predicted infections† (Pred.)	SIR: Obs. ÷ Pred.	Lower 95% CI	Upper 95% CI	Statistical comparison to national baseline (2006–2008)	Percentile range on 2013 national SIR distribution (lower = better)	Benchmarks: met 2013 HHS target (≤0.75) or zero infections**	
All Oregon	8,273	56	67.7	0.83	0.63	1.07	Fewer infections	See executive summary		
Adventist Medical Center	290	3	3.9	0.76	0.19	2.08	Fewer infections	51–75th		
Asante Rogue Regional Medical Center	351	4	2.7	1.49	0.47	3.59	More infections	76–90th		
Asante Three Rivers Medical Center	264	6	1.6	3.67	1.49	7.63	Statistically more infections	91–100th		
Ashland Community Hospital	56	0	0.3	§					✓ Zero infections	
Bay Area Hospital	148	0	1.1	0.00	II	2.65	Fewer infections	0-25th	Met HHS target Zero infections	
Columbia Memorial Hospital	21	0	0.2	§					✓ Zero infections	
Good Samaritan Regional Medical Center	257	1	2.3	0.44	0.02	2.17	Fewer infections	26–50th	✓ Met HHS target	
Good Shepherd Medical Center	59	0	0.5	§					✓ Zero infections	
Grande Ronde Hospital	27	0	0.2	§					✓ Zero infections	
Kaiser Permanente Westside Medical Center	757	6	4.2	1.43	0.58	2.97	More infections	76–90th		
Legacy Emanuel Medical Center	33	1	0.6	§						
Legacy Good Samaritan Medical Center	214	1	2.9	0.35	0.02	1.71	Fewer infections	26–50th	✓ Met HHS target	
Legacy Meridian Park Medical Center	446	1	2.2	0.45	0.02	2.23	Fewer infections	26–50th	✓ Met HHS target	
Legacy Mount Hood Medical Center	67	0	0.5	§					✓ Zero infections	

2013 national SIR distribution: SSI following HPRO 0.000 0.000 0.579 0.977 1.608

Table 12. Facility-specific 2014 annual SSI data for hip prostheses (HPRO)

	Star	ndardized infe	ection ra	tio (SIR)	‡	2014 SIR interpretation and benchmarking			
Hospital name*	Total proce- dures	Observed infections (Obs.)	Predicted infections† (Pred.)	SIR: Obs. ÷ Pred.	Lower 95% CI	Upper 95% CI	Statistical comparison to national baseline (2006–2008)	Percentile range on 2013 national SIR distribution (lower = better) ¶	Benchmarks: met 2013 HHS target (≤0.75) or zero infections**
McKenzie-Willamette Medical Center	142	0	0.9	§					✓ Zero infections
Mercy Medical Center	118	1	0.9	§					
Mid-Columbia Medical Center	60	0	0.4	§					✓ Zero infections
Oregon Health & Science University	419	3	5.0	0.60	0.15	1.62	Fewer infections	51–75th	✓ Met HHS target
Peace Harbor Hospital	47	0	0.2	§					✓ Zero infections
Providence Hood River Memorial	57	1	0.3	§					
Providence Medford Medical Center	194	0	0.9	§					✓ Zero infections
Providence Milwaukie Hospital	95	1	0.6	§					
Providence Newberg Medical Center	40	0	0.2	§					✓ Zero infections
Providence Portland Medical Center	447	6	4.4	1.36	0.55	2.83	More infections	76–90th	
Providence Seaside Hospital	10	0	0.07	§					✓ Zero infections
Providence St. Vincent Medical Center	747	6	6.7	0.90	0.37	1.88	Fewer infections	51–75th	
Providence Willamette Falls Medical Center	176	1	1.1	0.94	0.05	4.62	Fewer infections	51–75th	
Sacred Heart Medical Center - Riverbend	752	3	6.8	0.44	0.11	1.21	Fewer infections	26–50th	✓ Met HHS target
Salem Hospital	747	4	7.2	0.56	0.18	1.35	Fewer infections	26–50th	✓ Met HHS target

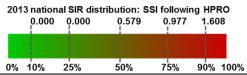


Table 12. Facility-specific 2014 annual SSI data for hip prostheses (HPRO)

		Star	ndardized infe	ection ra	tio (SIR)	‡	2014 SIR interpretation and benchmarking			
Hospital name*	Total proce- dures	Observed infections (Obs.)	Predicted infections† (Pred.)	SIR: Obs. ÷ Pred.	Lower 95% CI	Upper 95% CI	Statistical comparison to national baseline (2006–2008)	Percentile range on 2013 national SIR distribution (lower = better) ¶	Benchmarks: met 2013 HHS target (≤0.75) or zero infections**	
Samaritan Albany General Hospital	74	0	0.6	§					✓ Zero infections	
Samaritan Pacific Communities Hospital	8	0	0.07	§					✓ Zero infections	
Santiam Memorial Hospital	15	0	0.07	§					Zero infections	
Silverton Hospital	90	0	0.4	§					✓ Zero infections	
Sky Lakes Medical Center	143	1	1.1	0.92	0.05	4.53	Fewer infections	51–75th		
St. Alphonsus Medical Center - Baker City	29	0	0.1	§					✓ Zero infections	
St. Alphonsus Medical Center - Ontario	64	0	0.5	§					✓ Zero infections	
St. Anthony Hospital	23	0	0.1	§					✓ Zero infections	
St. Charles Medical Center - Bend	560	5	4.5	1.10	0.40	2.44	More infections	76–90th		
St. Charles Medical Center - Redmond	49	0	0.3	§					✓ Zero infections	
Tillamook County Hospital	11	0	0.06	§					✓ Zero infections	
Tuality Community Hospital	70	0	0.5	§					✓ Zero infections	
Willamette Valley Medical Center	80	1	0.6	§						

^{* 42} hospitals reported SSIs following HPRO surgeries in 2014; 19 hospitals performing <20 procedures annually applied for exemption from reporting

[‡] Only deep incisional /organ space SSIs were included in the SIR calculations due to variation in surveillance techniques for superficial infections, per CDC protocol

[†] Predicted number of infections based on national HPRO SSI data from 2006–2008, adjusted for individual patient risk factors (see methods)

[§] SIR is not calculated when the predicted number of infections is <1 per CDC protocols

I If the SIR is 0, no lower 95% confidence interval (CI) is reported

[¶] No 2014 national data available at the time of report publication, so 2013 data were used, available here: www.cdc.gov/hai/progress-report/index.html

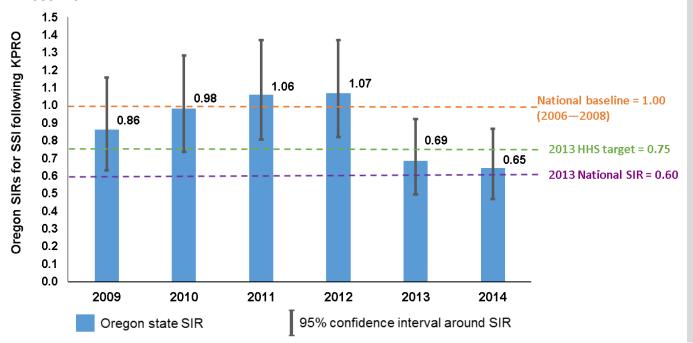
^{**}The U.S. Department of Health and Human Services (HHS) set a five-year SSI HPRO reduction target of 25% (SIR=0.75) in 2009: www.health.gov/hcg/pdfs/HAI-Targets.pdf

Surgical site infection (SSI) following knee replacement surgery (KPRO)

Surgical site infections (SSIs) occur in 2–5% of patients undergoing inpatient surgery and lead to increased morbidity, mortality and length of stay. ¹⁰ These infections can affect the superficial skin and tissue layers as well as deep-incisional and organ space areas. Standardized infection ratios (SIRs) reported on this page and in the following table are for deep-incisional and organ space SSIs only, due to the inconsistency in reporting of superficial SSIs. A KPRO SSI can occur following knee prosthesis surgery.

In Oregon, SSIs following knee prosthesis surgery have been reportable through the state's mandatory HAI reporting program since 2009. In 2014, Oregon hospitals reported an SIR of 0.65, meaning there were 35% fewer infections than predicted by risk-adjusted national baselines, and hospitals exceeded the 2013 HHS target SIR of 0.75 (Figure 11, green line). When comparing Oregon's 2014 KPRO SSI SIR to the most recent annual SIRs published by CDC (Figure 11, purple line), Oregon's KPRO SSI SIR was slightly higher but was statistically equal to the nation (p=0.64).

Figure 11. Aggregate SIRs for SSI following knee prosthesis (KPRO) surgery for Oregon: 2009–2014





What can providers do to prevent surgical site infections?

- Clean hands and arms up to elbows with an antiseptic agent before surgery
- Perform vigilant hand hygiene during post-operative care
- Remove hair immediately before surgery using electric clippers (not a razor)
- ✓ Wear sterile barriers during surgery and minimize entry/exit
- Provide appropriate antibiotics within 60 minutes before the surgery starts and discontinue within 24 hours after surgery

CDC prevention resources:

2013 national SIR distribution: SSI following KPRO
0.000 0.000 0.479 0.901 1.526
0% 10% 25% 50% 75% 90% 100%

Table 14. Facility-specific 2014 annual SSI data for knee prostheses (KPRO)

		Stan	dardized infe	ction ra	tio (SIR)	‡	2014 SIR interpretation and benchmarking			
Hospital name*	Total proce- dures	Observed infections (Obs.)	Predicted infections† (Pred.)	SIR: Obs. ÷ Pred.	Lower 95% CI	Upper 95% CI	Statistical comparison to national baseline (2006–2008)	Percentile range on 2013 national SIR distribution (lower = better) ¶	Benchmarks: met 2013 HHS target (≤0.75) or zero infections**	
All Oregon	10,586	41	63.6	0.65	0.47	0.87	Statistically fewer infections	See executive summary	✓ Met HHS target	
Adventist Medical Center	361	3	3.0	0.99	0.25	2.70	Fewer infections	76–90th		
Asante Rogue Regional Medical Center	476	2	2.3	0.87	0.15	2.88	Fewer infections	51–75th		
Asante Three Rivers Medical Center	334	2	1.8	1.14	0.19	3.77	More infections	76–90th		
Ashland Community Hospital	93	0	0.4	§					✓ Zero infections	
Bay Area Hospital	229	2	1.4	1.46	0.25	4.84	More infections	76–90th		
Columbia Memorial Hospital	30	0	0.2	§					✓ Zero infections	
Good Samaritan Regional Medical Center	255	0	1.7	0.00	II	1.76	Fewer infections	0-25th	Met HHS target Zero infections	
Good Shepherd Medical Center	115	0	0.9	§					✓ Zero infections	
Grande Ronde Hospital	31	0	0.1	§					✓ Zero infections	
Kaiser Permanente Westside Medical Center	1,242	6	6.6	0.91	0.37	1.89	Fewer infections	76–90th		
Legacy Emanuel Medical Center	3	0	0.03	§					✓ Zero infections	
Legacy Good Samaritan Medical Center	227	2	1.8	1.11	0.19	3.66	More infections	76–90th		
Legacy Meridian Park Medical Center	653	3	2.9	1.03	0.26	2.81	More infections	76–90th		
Legacy Mount Hood Medical Center	121	0	0.6	§					✓ Zero infections	

2013 national SIR distribution: SSI following KPRO 0.000 0.000 0.479 0.901 1.526 0.901 1.526 0.901 1.526 0.901 0.9

Table 14. Facility-specific 2014 annual SSI data for knee prostheses (KPRO)

		Standardized infection ratio (SIR) ‡					2014 SIR interpretation and benchmarking			
Hospital name*	Total proce- dures	Observed infections (Obs.)	Predicted infections† (Pred.)	SIR: Obs. ÷ Pred.	Lower 95% CI	Upper 95% CI	Statistical comparison to national baseline (2006–2008)	Percentile range on 2013 national SIR distribution (lower = better) ¶	Benchmarks: met 2013 HHS target (≤0.75) or zero infections**	
McKenzie-Willamette Medical Center	363	0	1.9	0.00	II	1.59	Fewer infections	0-25th	Met HHS target Zero infections	
Mercy Medical Center	88	0	0.5	§					✓ Zero infections	
Mid-Columbia Medical Center	77	0	0.3	§					✓ Zero infections	
Oregon Health & Science University	341	3	2.8	1.06	0.27	2.88	More infections	76–90th		
Peace Harbor Hospital	40	0	0.2	§					✓ Zero infections	
Providence Hood River Memorial	84	0	0.5	§					✓ Zero infections	
Providence Medford Medical Center	154	2	0.7	§						
Providence Milwaukie Hospital	159	2	0.9	§						
Providence Newberg Medical Center	101	0	0.4	§					✓ Zero infections	
Providence Portland Medical Center	585	3	4.0	0.76	0.19	2.07	Fewer infections	51–75th		
Providence Seaside Hospital	14	0	0.09	§					✓ Zero infections	
Providence St. Vincent Medical Center	535	3	4.3	0.69	0.18	1.89	Fewer infections	51–75th	✓ Met HHS target	
Providence Willamette Falls Medical Center	213	1	1.1	0.90	0.05	4.42	Fewer infections	51–75th		
Sacred Heart Medical Center - Riverbend	901	0	5.7	0.00		0.53	Statistically fewer infections	0-25th	Met HHS target Zero infections	
Salem Hospital	817	0	5.0	0.00	II	0.60	Statistically fewer infections	0-25th	Met HHS target Zero infections	

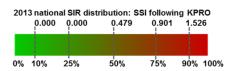


Table 14. Facility-specific 2014 annual SSI data for knee prostheses (KPRO)

		Standardized infection ratio (SIR) ‡				‡	2014 SIR interpretation and benchmarking			
Hospital name*	Total proce- dures	Observed infections (Obs.)	Predicted infections† (Pred.)	SIR: Obs. ÷ Pred.	Lower 95% CI	Upper 95% CI	Statistical comparison to national baseline (2006–2008)	Percentile range on 2013 national SIR distribution (lower = better) ¶	Benchmarks: met 2013 HHS target (≤0.75) or zero infections**	
Samaritan Albany General Hospital	146	0	1.1	0.00	П	2.82	Fewer infections	0-25th	Met HHS target Zero infections	
Samaritan North Lincoln Hospital	22	0	0.1	§					✓ Zero infections	
Samaritan Pacific Communities Hospital	3	0	0.03	§					✓ Zero infections	
Santiam Memorial Hospital	17	0	0.07	§					✓ Zero infections	
Silverton Hospital	149	2	0.6	§						
Sky Lakes Medical Center	242	2	1.5	1.38	0.23	4.54	More infections	76–90th		
St. Alphonsus Medical Center - Baker City	40	0	0.2	§					✓ Zero infections	
St. Alphonsus Medical Center - Ontario	107	0	0.6	§					✓ Zero infections	
St. Anthony Hospital	74	0	0.4	§					✓ Zero infections	
St. Charles Medical Center - Bend	819	3	5.3	0.57	0.15	1.55	Fewer infections	51–75th	✓ Met HHS target	
St. Charles Medical Center - Redmond	41	0	0.2	§					✓ Zero infections	
Tillamook County Hospital	21	0	0.07	§					✓ Zero infections	
Tuality Community Hospital	148	0	0.8	§					✓ Zero infections	
Willamette Valley Medical Center	104	0	0.7	§					✓ Zero infections	

^{* 43} hospitals reporting SSIs following KPRO in 2014 listed; 18 hospitals performing <20 procedures annually applied for exemption from reporting

[†] Only deep incisional /organ space SSIs were included in the SIR calculations due to variation in surveillance techniques for superficial infections, per CDC protocol

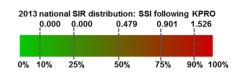


Table 14. Facility-specific 2014 annual SSI data for knee prostheses (KPRO)

- ‡ Predicted number of infections based on national KPRO SSI data from 2006–2008, adjusted for individual patient risk factors (see methods)
- § SIR is not calculated when the predicted number of infections is <1 per CDC protocols
- || If the SIR is 0, no lower 95% confidence interval (CI) is reported
- No 2014 national data available at the time of report publication, so 2013 data were used, available here: www.cdc.gov/hai/progress-report/index.html
- ** The U.S. Department of Health and Human Services (HHS) set a five-year SSI KPRO reduction target of 25% (SIR=0.75) in 2009: www.health.gov/hcg/pdfs/HAI-Targets.pdf

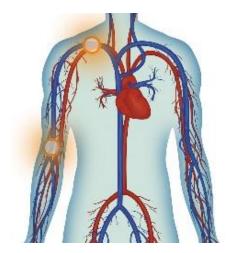
Bloodstream infections (BSI) in freestanding outpatient dialysis facilities

Oregon dialysis facilities have been mandated to report dialysis events since January 2013. Because of the nature of their treatment, dialysis patients are at risk of getting bloodstream infections that can be spread from surfaces and health care worker hands to a patient's bloodstream through their dialysis access point. Of particular concern is hepatitis B and C viruses that can live on surfaces such as dialysis chairs and machines, and be spread even with no visible blood. Nationwide, about 370,000 people with end-stage renal disease rely on hemodialysis; CDC estimates around 37,000 dialysis patients contracted a bloodstream infection related to dialysis in 2008.¹¹

Patients can receive hemodialysis through different access types: fistula, graft and central venous catheters (CVC, tunneled or non-tunneled). These access types are associated with differing underlying risks of infection (fistula is the lowest and CVCs the highest). The tables below are stratified by access type and compared to the national mean for each access type. Oregon dialysis facilities had 65% fewer bloodstream infections than the nation as a whole. Bloodstream infection rates are presented in tables stratified by access type and statistical comparison to the pooled national mean are made using the mid-P exact test.

Table 15. National pooled means (2013) and Oregon pooled means (2014) for bloodstream infections (BSI) by access type

Access type	National pooled mean	Oregon pooled mean	Percent difference
All	1.27	0.50	-65%
Fistula	0.48	0.21	-57%
Graft	0.88	0.44	-50%
Any CVC	3.21	1.37	-57%
Tunneled CVC	3.24	1.35	-58%
Non-tunneled CVC	2.78	3.30	19%



What can providers do to prevent BSI in dialysis settings?

- ✓ Track infections and feedback rates to providers regularly
- ✓ Practice vigilant hand hygiene
- Assess staff adherence to aseptic technique when connecting and disconnecting catheters and during dressing changes
- ✓ Reduce use of catheters

CDC prevention tools:

www.cdc.gov/dialysis/prevention-tools/index.html

Table 16. Facility-specific 2014 annual data for Oregon dialysis facilities (N=59)

Dialysis facility name	Access type	Patient- months	Number BSI	Rate: BSI/100 patient- months	Comparison to national pooled mean	Percentile on national distribution (lower = better)	Change since 2013
	All	247	1	0.41	Fewer infections		-13%
	Fistula	150	1	0.67	More infections	79%	+9%
D. M	Graft	44	0	0.00	Fewer infections	50%	
Blue Mountain Kidney Center	Any CVC	53	0	0.00	Fewer infections	10%	
radicy center	Tunneled central line	53	0	0.00	Fewer infections	10%	
	Non-tunneled central line	0	0		n/a		
	Other	0	0		n/a		
	All	926	5	0.54	Statistically fewer infections		-33%
	Fistula	550	1	0.18	Fewer infections	49%	-39%
	Graft	113	2	1.77	More infections	83%	+6%
Coos Bay	Any CVC	263	2	0.76	Statistically fewer infections	25%	-51%
	Tunneled central line	263	2	0.76	Statistically fewer infections	28%	-51%
	Non-tunneled central line	0	0		n/a		
	Other	0	0		n/a		
	All	203	2	0.99	Fewer infections		+61%
	Fistula	143	0	0.00	Fewer infections	25%	
	Graft	29	0	0.00	Fewer infections	50%	
Eastern Oregon	Any CVC	31	2	6.45	More infections	84%	-3%
	Tunneled central line	31	1	3.23	Fewer infections	57%	-52%
	Non-tunneled central line	0	1		n/a		
	Other	0	0		n/a		
	All	1,427	5	0.35	Statistically fewer infections		-45%
	Fistula	944	2	0.21	Fewer infections	51%	-62%
	Graft	148	2	1.35	More infections	78%	+136%
Eugene Dialysis Services	Any CVC	335	1	0.30	Statistically fewer infections	16%	-66%
OCI VICES	Tunneled central line	335	1	0.30	Statistically fewer infections	19%	-66%
	Non-tunneled central line	0	0		n/a		
	Other	0	0		n/a		
	All	426	5	1.17	Fewer infections		+7%
EMO Osmallia	Fistula	355	1	0.28	Fewer infections	56%	-74%
FMC-Corvallis	Graft	16	0	0.00	Fewer infections	50%	-
	Any CVC	55	4	7.27	More infections	88%	+402%

Dialysis facility name	Access type	Patient- months	Number BSI	Rate: BSI/100 patient- months	Comparison to national pooled mean	Percentile on national distribution (lower = better)	Change since 2013
	Tunneled central line	55	4	7.27	More infections	86%	+402%
	Non-tunneled central line	0	0		n/a		
	Other	0	0		n/a		
	All	230	1	0.44	Fewer infections		
	Fistula	177	0	0.00	Fewer infections	25%	
FMO Flancia	Graft	6	0	0.00	Fewer infections	50%	
FMC-Florence Dialysis	Any CVC	46	1	2.17	Fewer infections	46%	
2.0.,0.0	Tunneled central line	46	1	2.17	Fewer infections	45%	
	Non-tunneled central line	0	0		n/a		
	Other	1	0	0.00	n/a		
	All	870	2	0.23	Statistically fewer infections		-61%
	Fistula	594	0	0.00	Fewer infections	25%	-100%
	Graft	182	1	0.55	Fewer infections	62%	
FMC-Mt. Hood	Any CVC	89	1	1.12	Fewer infections	31%	-56%
	Tunneled central line	89	1	1.12	Fewer infections	33%	-61%
	Non-tunneled central line	0	0		n/a		
	Other	5	0	0.00	n/a		
	All	712	2	0.28	Statistically fewer infections		-33%
	Fistula	405	0	0.00	Fewer infections	25%	-100%
	Graft	125	0	0.00	Fewer infections	50%	
FMC-Maywood Park Dialysis	Any CVC	182	2	1.10	Fewer infections	30%	
Diaryon	Tunneled central line	182	2	1.10	Fewer infections	32%	
	Non-tunneled central line	0	0		n/a		
	Other	0	0		n/a		
	All	181	1	0.55	Fewer infections		
	Fistula	154	1	0.65	More infections	78%	
EMO 14""	Graft	0	0		n/a	0%	
FMC-Milton Freewater	Any CVC	27	0	0.00	Fewer infections	10%	
	Tunneled central line	27	0	0.00	Fewer infections	10%	
	Non-tunneled central line	0	0		n/a		
	Other	0	0		n/a		
FMC-Noble Woods	All	377	1	0.27	Fewer infections		

Dialysis facility name	Access type	Patient- months	Number BSI	Rate: BSI/100 patient- months	Comparison to national pooled mean	Percentile on national distribution (lower = better)	Change since 2013
	Fistula	310	0	0.00	Fewer infections	25%	
	Graft	17	1	5.88	More infections	100%	
	Any CVC	50	0	0.00	Fewer infections	10%	
	Tunneled central line	50	0	0.00	Fewer infections	10%	
	Non-tunneled central line	0	0		n/a		
	Other	0	0		n/a		
	All	138	0	0.00	Fewer infections		
	Fistula	108	0	0.00	Fewer infections	25%	
	Graft	12	0	0.00	Fewer infections	50%	
FMC-Sandy	Any CVC	18	0	0.00	Fewer infections	10%	
	Tunneled central line	18	0	0.00	Fewer infections	10%	
	Non-tunneled central line	0	0		n/a	12,72	
	Other	0	0		n/a		
	All	253	2	0.79	Fewer infections		
	Fistula	130	1	0.77	More infections	82%	
	Graft	68	0	0.00	Fewer infections	50%	
FMC- Scholls Ferry	Any CVC	55	1	1.82	Fewer infections	40%	
	Tunneled central line	55	1	1.82	Fewer infections	41%	
	Non-tunneled central line	0	0		n/a		
	Other	0	0		n/a		
	All	179	0	0.00	Fewer infections		
	Fistula	109	0	0.00	Fewer infections	25%	
	Graft	52	0	0.00	Fewer infections	50%	
FMC-Hilltop Dialysis	Any CVC	18	0	0.00	Fewer infections	10%	
	Tunneled central line	18	0	0.00	Fewer infections	10%	
	Non-tunneled central line	0	0		n/a		
	Other	0	0		n/a		
	All	586	1	0.17	Statistically fewer infections		-76%
	Fistula	448	1	0.22	Fewer infections	52%	-54%
Four Rivers Dialysis	Graft	97	0	0.00	Fewer infections	50%	
Center	Any CVC	40	0	0.00	Fewer infections	10%	-100%
	Tunneled central line	40	0	0.00	Fewer infections	10%	-100%
	Non-tunneled central line	0	0		n/a		

Dialysis facility name	Access type	Patient- months	Number BSI	Rate: BSI/100 patient- months	Comparison to national pooled mean	Percentile on national distribution (lower = better)	Change since 2013
	Other	1	0	0.00	n/a		
	All	623	2	0.32	Statistically fewer infections		
	Fistula	480	0	0.00	Fewer infections	25%	
0 1 5 11	Graft	53	1	1.89	More infections	84%	
Grants Pass II Dialysis	Any CVC	90	1	1.11	Fewer infections	30%	
Bidiyolo	Tunneled central line	90	1	1.11	Fewer infections	32%	
	Non-tunneled central line	0	0		n/a		
	Other	0	0		n/a		
	All	961	6	0.62	Fewer infections		-46%
	Fistula	697	2	0.29	Fewer infections	57%	+76%
	Graft	65	0	0.00	Fewer infections	50%	-100%
Gresham Dialysis Center	Any CVC	199	4	2.01	Fewer infections	43%	-46%
ocition	Tunneled central line	199	4	2.01	Fewer infections	43%	-46%
	Non-tunneled central line	0	0		n/a		
	Other	0	0		n/a		
	All	410	2	0.49	Fewer infections		
	Fistula	337	1	0.30	Fewer infections	57%	
Hermiston	Graft	37	0	0.00	Fewer infections	50%	
Community Dialysis	Any CVC	36	1	2.78	Fewer infections	53%	
Center	Tunneled central line	34	1	2.94	Fewer infections	54%	
	Non-tunneled central line	2	0	0.00	Fewer infections		
	Other	0	0		n/a		
	All	134	0	0.00	Fewer infections		-100%
	Fistula	70	0	0.00	Fewer infections	25%	
	Graft	55	0	0.00	Fewer infections	50%	
Hillsboro Dialysis Center	Any CVC	9	0	0.00	Fewer infections	10%	-100%
Conto	Tunneled central line	9	0	0.00	Fewer infections	10%	-100%
	Non-tunneled central line	0	0		n/a		
	Other	0	0		n/a		
	All	653	3	0.46	Statistically fewer infections		+170%
Klamath Falls	Fistula	425	0	0.00	Fewer infections	25%	-100%
Dialysis	Graft	96	0	0.00	Fewer infections	50%	
	Any CVC	132	3	2.27	Fewer infections	47%	

Dialysis facility name	Access type	Patient- months	Number BSI	Rate: BSI/100 patient- months	Comparison to national pooled mean	Percentile on national distribution (lower = better)	Change since 2013
	Tunneled central line	130	3	2.31	Fewer infections	47%	
	Non-tunneled central line	2	0	0.00	Fewer infections		
	Other	0	0		n/a		
	All	1,144	3	0.26	Statistically fewer infections		+231%
	Fistula	755	1	0.13	Fewer infections	42%	
	Graft	326	2	0.61	Fewer infections	64%	+72%
Lake Road Dialysis	Any CVC	63	0	0.00	Fewer infections	10%	
	Tunneled central line	63	0	0.00	Fewer infections	10%	
	Non-tunneled central line	0	0		n/a		
	Other	0	0		n/a		
	All	637	7	1.10	Fewer infections		+514%
	Fistula	520	2	0.39	Fewer infections	63%	+73%
	Graft	51	2	3.92	More infections	99%	
Lebanon Dialysis	Any CVC	64	3	4.69	More infections	74%	
	Tunneled central line	64	3	4.69	More infections	71%	
	Non-tunneled central line	0	0		n/a		
	Other	2	0	0.00	n/a		
	All	482	2	0.42	Fewer infections		+56%
	Fistula	327	0	0.00	Fewer infections	25%	
	Graft	31	0	0.00	Fewer infections	50%	-100%
McMinnville Dialysis	Any CVC	124	2	1.61	Fewer infections	38%	
	Tunneled central line	124	2	1.61	Fewer infections	38%	
	Non-tunneled central line	0	0		n/a		
	Other	0	0		n/a		
	All	620	2	0.32	Statistically fewer infections		
	Fistula	377	2	0.53	More infections	74%	
	Graft	165	0	0.00	Fewer infections	50%	
Meridian Park	Any CVC	78	0	0.00	Fewer infections	10%	
	Tunneled central line	76	0	0.00	Fewer infections	10%	
	Non-tunneled central line	2	0	0.00	Fewer infections		
	Other	0	0		n/a		
Newport Oregon	All	474	1	0.21	Statistically fewer infections		
Newport Oregon	Fistula	392	1	0.26	Fewer infections	54%	

Dialysis facility name	Access type	Patient- months	Number BSI	Rate: BSI/100 patient- months	Comparison to national pooled mean	Percentile on national distribution (lower = better)	Change since 2013
	Graft	9	0	0.00	Fewer infections	50%	
	Any CVC	73	0	0.00	Fewer infections	10%	
	Tunneled central line	73	0	0.00	Fewer infections	10%	
	Non-tunneled central line	0	0		n/a		
	Other	0	0		n/a		
	All	1,041	5	0.48	Statistically fewer infections		-11%
	Fistula	694	3	0.43	Fewer infections	67%	+5%
	Graft	229	1	0.44	Fewer infections	60%	+16%
Northeast Portland Renal Center	Any CVC	107	1	0.94	Fewer infections	28%	-52%
rtenar center	Tunneled central line	107	1	0.94	Fewer infections	30%	-53%
	Non-tunneled central line	0	0		n/a		
	Other	11	0	0.00	n/a		
	All	272	1	0.37	Fewer infections		
	Fistula	140	1	0.71	More infections	80%	
	Graft	21	0	0.00	Fewer infections	50%	
Northeast Salem Dialysis	Any CVC	111	0	0.00	Statistically fewer infections	10%	
Dialysis	Tunneled central line	111	0	0.00	Statistically fewer infections	10%	
	Non-tunneled central line	0	0		n/a		
	Other	0	0		n/a		
	All	989	2	0.20	Statistically fewer infections		+16%
	Fistula	704	1	0.14	Fewer infections	44%	
	Graft	180	0	0.00	Fewer infections	50%	-100%
Oregon Kidney Center	Any CVC	105	1	0.95	Fewer infections	28%	+63%
Ochlei	Tunneled central line	105	1	0.95	Fewer infections	31%	+62%
	Non-tunneled central line	0	0		n/a		
	Other	0	0		n/a		
	All	250	2	0.80	Fewer infections		
	Fistula	180	0	0.00	Fewer infections	25%	
	Graft	32	1	3.13	More infections	94%	
PNRS Columbia River The Dalles	Any CVC	35	1	2.86	Fewer infections	54%	
Mivel The Dalles	Tunneled central line	17	1	5.88	More infections	79%	
	Non-tunneled central line	18	0	0.00	Fewer infections		
	Other	3	0	0.00	n/a		

Dialysis facility name	Access type	Patient- months	Number BSI	Rate: BSI/100 patient- months	Comparison to national pooled mean	Percentile on national distribution (lower = better)	Change since 2013
	All	432	1	0.23	Statistically fewer infections		-77%
	Fistula	243	0	0.00	Fewer infections	25%	-100%
Pacific Northwest	Graft	131	1	0.76	Fewer infections	67%	-20%
Renal Services -	Any CVC	42	0	0.00	Fewer infections	10%	-100%
Astoria	Tunneled central line	42	0	0.00	Fewer infections	10%	-100%
	Non-tunneled central line	0	0		n/a		
	Other	16	0	0.00	n/a		
	All	1,422	2	0.14	Statistically fewer infections		+109%
	Fistula	912	0	0.00	Statistically fewer infections	25%	
Pacific Northwest	Graft	263	1	0.38	Fewer infections	59%	-5%
Renal Services -	Any CVC	234	1	0.43	Statistically fewer infections	19%	
Beaverton	Tunneled central line	234	1	0.43	Statistically fewer infections	23%	
	Non-tunneled central line	0	0		n/a		
	Other	13	0	0.00	n/a		
	All	1,260	1	0.08	Statistically fewer infections		-90%
	Fistula	747	0	0.00	Statistically fewer infections	25%	-100%
Pacific Northwest	Graft	272	0	0.00	Fewer infections	50%	
Renal Services -	Any CVC	237	1	0.42	Statistically fewer infections	19%	-87%
Hollywood	Tunneled central line	237	1	0.42	Statistically fewer infections	23%	-87%
	Non-tunneled central line	0	0		n/a		
	Other	4	0	0.00	n/a		
	All	332	3	0.90	Fewer infections		+166%
	Fistula	222	1	0.45	Fewer infections	68%	
Pacific Northwest	Graft	51	0	0.00	Fewer infections	50%	
Renal Services - St.	Any CVC	59	2	3.39	More infections	60%	+86%
Helens	Tunneled central line	59	2	3.39	More infections	58%	+86%
	Non-tunneled central line	0	0		n/a		
	Other	0	0		n/a		
	All	1,011	3	0.30	Statistically fewer infections		-72%
Pacific Northwest	Fistula	671	1	0.15	Fewer infections	45%	-77%
Renal Services, -	Graft	131	0	0.00	Fewer infections	50%	
Clackamas	Any CVC	209	2	0.96	Statistically fewer infections	28%	-71%
	Tunneled central line	209	2	0.96	Statistically fewer infections	31%	-71%

Dialysis facility name	Access type	Patient- months	Number BSI	Rate: BSI/100 patient- months	Comparison to national pooled mean	Percentile on national distribution (lower = better)	Change since 2013
	Non-tunneled central line	0	0		n/a		
	Other	0	0		n/a		
	All	79	3	3.80	More infections		+3%
	Fistula	17	0	0.00	Fewer infections	25%	
Pacific Northwest	Graft	0	0		n/a		
Renal Services, -	Any CVC	62	3	4.84	More infections	75%	+18%
Emanuel Pediatrics	Tunneled central line	62	3	4.84	More infections	73%	+18%
	Non-tunneled central line	0	0		n/a		
	Other	0	0		n/a		
	All	436	4	0.92	Fewer infections		+61%
	Fistula	299	1	0.33	Fewer infections	60%	-35%
Pacific Northwest	Graft	76	0	0.00	Fewer infections	50%	
Renal Services-	Any CVC	60	3	5.00	More infections	76%	+290%
Evergreen	Tunneled central line	60	3	5.00	More infections	75%	+290%
	Non-tunneled central line	0	0		n/a		
	Other	1	0	0.00	n/a		
	All	269	0	0.00	Statistically fewer infections		-100%
	Fistula	154	0	0.00	Fewer infections	25%	-100%
Pacific Northwest	Graft	70	0	0.00	Fewer infections	50%	
Renal Services -	Any CVC	43	0	0.00	Fewer infections	10%	-100%
Newberg	Tunneled central line	43	0	0.00	Fewer infections	10%	-100%
	Non-tunneled central line	0	0		n/a		
	Other	2	0	0.00	n/a		
	All	780	4	0.51	Statistically fewer infections		-43%
	Fistula	488	0	0.00	Fewer infections	25%	-100%
Pacific Northwest	Graft	161	0	0.00	Fewer infections	50%	-100%
Renal Services -	Any CVC	131	4	3.05	Fewer infections	56%	+2%
Twin Oaks	Tunneled central line	131	4	3.05	Fewer infections	55%	+2%
	Non-tunneled central line	0	0		n/a		
	Other	0	0		n/a		
Pacific Northwest	All	892	2	0.22	Statistically fewer infections		-71%
Renal Services -	Fistula	573	0	0.00	Fewer infections	25%	-100%
Tualatin	Graft	185	2	1.08	More infections	74%	205%

Dialysis facility name	Access type	Patient- months	Number BSI	Rate: BSI/100 patient- months	Comparison to national pooled mean	Percentile on national distribution (lower = better)	Change since 2013
	Any CVC	129	0	0.00	Statistically fewer infections	10%	-100%
	Tunneled central line	116	0	0.00	Statistically fewer infections	10%	-100%
	Non-tunneled central line	13	0	0.00	Fewer infections		
	Other	5	0	0.00	n/a		
	All	719	5	0.70	Fewer infections		+63%
	Fistula	521	1	0.19	Fewer infections	50%	-50%
5 5	Graft	106	0	0.00	Fewer infections	50%	
Portland Dialysis Center	Any CVC	89	4	4.49	More infections	72%	+251%
Contor	Tunneled central line	88	4	4.55	More infections	70%	+255%
	Non-tunneled central line	1	0	0.00	Fewer infections		
	Other	3	0	0.00	n/a		
	All	809	5	0.62	Fewer infections		-15%
	Fistula	529	3	0.57	More infections	76%	-33%
	Graft	136	0	0.00	Fewer infections	50%	
QCI Bend	Any CVC	132	2	1.52	Fewer infections	36%	+71%
	Tunneled central line	108	2	1.85	Fewer infections	41%	+109%
	Non-tunneled central line	24	0	0.00	Fewer infections		
	Other	12	0	0.00	n/a		
	All	1,480	12	0.81	Fewer infections		+19%
	Fistula	939	3	0.32	Fewer infections	59%	+65%
	Graft	169	1	0.59	Fewer infections	63%	-33%
Qualicenters-Salem	Any CVC	371	8	2.16	Fewer infections	45%	-1%
	Tunneled central line	371	8	2.16	Fewer infections	45%	-1%
	Non-tunneled central line	0	0		n/a		
	Other	1	0	0.00	n/a		
	All	649	1	0.15	Statistically fewer infections		-49%
	Fistula	493	0	0.00	Fewer infections	25%	-100%
	Graft	56	0	0.00	Fewer infections	50%	-100%
Qualicenters-Albany	Any CVC	100	1	1.00	Fewer infections	29%	
	Tunneled central line	99	0	0.00	Statistically fewer infections	10%	
	Non-tunneled central line	1	1	100.00	Statistically more infections		
	Other	0	0		n/a		
	All	388	3	0.77	Fewer infections		

Dialysis facility name	Access type	Patient- months	Number BSI	Rate: BSI/100 patient- months	Comparison to national pooled mean	Percentile on national distribution (lower = better)	Change since 2013
	Fistula	285	1	0.35	Fewer infections	61%	
	Graft	51	0	0.00	Fewer infections	50%	
Ray Yasui Dialysis	Any CVC	52	2	3.85	More infections	65%	
Center	Tunneled central line	52	2	3.85	More infections	63%	
	Non-tunneled central line	0	0		n/a		
	Other	0	0		n/a		
	All	862	6	0.70	Fewer infections		+53%
	Fistula	617	1	0.16	Fewer infections	46%	-46%
	Graft	130	1	0.77	Fewer infections	67%	+7%
Redmond Dialysis	Any CVC	115	4	3.48	More infections	61%	+168%
	Tunneled central line	109	4	3.67	More infections	61%	+150%
	Non-tunneled central line	6	0	0.00	Fewer infections		
	Other	0	0		n/a		
	All	338	2	0.59	Fewer infections		+404%
	Fistula	245	1	0.41	Fewer infections	65%	+158%
	Graft	46	1	2.17	More infections	88%	
Redwood Dialysis	Any CVC	47	0	0.00	Fewer infections	10%	
	Tunneled central line	47	0	0.00	Fewer infections	10%	
	Non-tunneled central line	0	0		n/a		
	Other	0	0		n/a		
	All	2,125	3	0.14	Statistically fewer infections		-42%
	Fistula	1,427	1	0.07	Statistically fewer infections	34%	-75%
	Graft	279	0	0.00	Fewer infections	50%	
Rogue Valley Dialysis	Any CVC	419	2	0.48	Statistically fewer infections	20%	+84%
Dialysis	Tunneled central line	418	2	0.48	Statistically fewer infections	25%	+85%
	Non-tunneled central line	1	0	0.00	Fewer infections		
	Other	0	0		n/a		
	All	1,411	9	0.64	Statistically fewer infections		+26%
	Fistula	881	2	0.23	Fewer infections	52%	
Rose Quarter	Graft	333	2	0.60	Fewer infections	64%	-16%
Dialysis	Any CVC	197	5	2.54	Fewer infections	51%	+18%
	Tunneled central line	190	4	2.11	Fewer infections	44%	-2%
	Non-tunneled central line	7	1	14.29	More infections		

Dialysis facility name	Access type	Patient- months	Number BSI	Rate: BSI/100 patient- months	Comparison to national pooled mean	Percentile on national distribution (lower = better)	Change since 2013
	Other	0	0		n/a		
	All	947	3	0.32	Statistically fewer infections		+49%
	Fistula	609	0	0.00	Fewer infections	25%	-100%
	Graft	67	0	0.00	Fewer infections	50%	
Roseburg-Mercy Dialysis	Any CVC	271	3	1.11	Statistically fewer infections	30%	+176%
Diarysis	Tunneled central line	267	3	1.12	Statistically fewer infections	33%	+180%
	Non-tunneled central line	4	0	0.00	Fewer infections		
	Other	0	0		n/a		
	All	923	10	1.08	Fewer infections		+96%
	Fistula	594	5	0.84	More infections	85%	+164%
	Graft	91	2	2.20	More infections	88%	+74%
Salem Dialysis	Any CVC	238	3	1.26	Fewer infections	33%	+23%
	Tunneled central line	238	3	1.26	Fewer infections	34%	+23%
	Non-tunneled central line	0	0		n/a		
	Other	0	0		n/a		
	All	611	8	1.31	More infections		+106%
	Fistula	346	4	1.16	More infections	92%	+51%
	Graft	122	0	0.00	Fewer infections	50%	-100%
Salem North Dialysis	Any CVC	143	4	2.80	Fewer infections	53%	
	Tunneled central line	143	4	2.80	Fewer infections	52%	
	Non-tunneled central line	0	0		n/a		
	Other	0	0		n/a n/a		
	All	292	3	1.03	Fewer infections		+153%
	Fistula	202	3	1.49	More infections	96%	
	Graft	72	0	0.00	Fewer infections	50%	
Sherwood	Any CVC	18	0	0.00	Fewer infections	10%	-100%
	Tunneled central line	18	0	0.00	Fewer infections	10%	-100%
	Non-tunneled central line	0	0		n/a n/a		
	Other	0	0		n/a n/a		
	All	1,423	3	0.21	Statistically fewer infections		-67%
Springfield Oregon	Fistula	877	1	0.11	Fewer infections	40%	-3%
Dialysis	Graft	156	0	0.00	Fewer infections	50%	-100%
	Any CVC	387	2	0.52	Statistically fewer infections	21%	-70%

Dialysis facility name	Access type	Patient- months	Number BSI	Rate: BSI/100 patient- months	Comparison to national pooled mean	Percentile on national distribution (lower = better)	Change since 2013
	Tunneled central line	387	2	0.52	Statistically fewer infections	25%	-70%
	Non-tunneled central line	0	0		n/a n/a		
	Other	3	0	0.00	n/a n/a		
	All	622	5	0.80	Fewer infections		-23%
	Fistula	347	0	0.00	Fewer infections	25%	-100%
T	Graft	106	1	0.94	More infections	71%	
THC/PNRS LLC - Raines	Any CVC	169	4	2.37	Fewer infections	48%	0%
Raines	Tunneled central line	166	4	2.41	Fewer infections	48%	-1%
	Non-tunneled central line	3	0	0.00	Fewer infections		
	Other	0	0		n/a n/a		
	All	183	1	0.55	Fewer infections		
	Fistula	86	1	1.16	More infections	92%	
	Graft	80	0	0.00	Fewer infections	50%	
Tillamook Dialysis Center	Any CVC	17	0	0.00	Fewer infections	10%	
Ochter	Tunneled central line	17	0	0.00	Fewer infections	10%	
	Non-tunneled central line	0	0		n/a n/a		
	Other	0	0		n/a n/a		
	All	511	1	0.20	Statistically fewer infections		-7%
	Fistula	360	0	0.00	Fewer infections	25%	
	Graft	108	0	0.00	Fewer infections	50%	-100%
Walker Road Dialysis	Any CVC	40	1	2.50	Fewer infections	50%	
Dialysis	Tunneled central line	40	1	2.50	Fewer infections	49%	
	Non-tunneled central line	0	0		n/a n/a		
	Other	3	0	0.00	n/a n/a		
	All	175	0	0.00	Fewer infections		-100%
	Fistula	126	0	0.00	Fewer infections	25%	-100%
West Linn Dialysis Center	Graft	25	0	0.00	Fewer infections	50%	-100%
	Any CVC	24	0	0.00	Fewer infections	10%	-100%
	Tunneled central line	24	0	0.00	Fewer infections	10%	-100%
	Non-tunneled central line	0	0		n/a n/a		
	Other	0	0		n/a n/a		
Mach Calana	All	481	1	0.21	Statistically fewer infections		-64%
West Salem	Fistula	250	0	0.00	Fewer infections	25%	

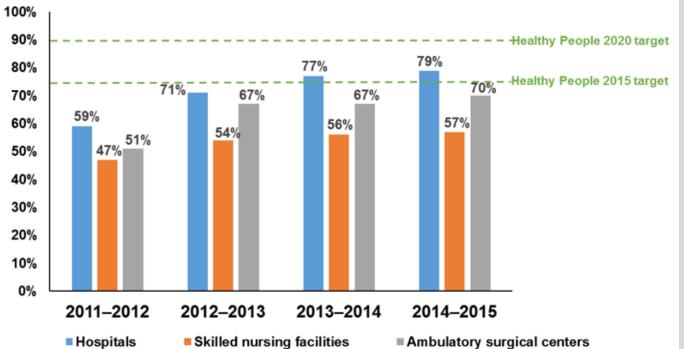
Dialysis facility name	Access type	Patient- months	Number BSI	Rate: BSI/100 patient- months	Comparison to national pooled mean	Percentile on national distribution (lower = better)	Change since 2013
	Graft	66	1	1.52	More infections	80%	
	Any CVC	165	0	0.00	Statistically fewer infections	10%	-100%
	Tunneled central line	161	0	0.00	Statistically fewer infections	10%	-100%
	Non-tunneled central line	4	0	0.00	Fewer infections		
	Other	0	0		n/a n/a		
	All	453	1	0.22	Statistically fewer infections		-76%
	Fistula	305	0	0.00	Fewer infections	25%	
	Graft	105	0	0.00	Fewer infections	50%	-100%
Willamette Valley Renal Center	Any CVC	43	1	2.33	Fewer infections	48%	-70%
Trondr dontor	Tunneled central line	40	1	2.50	Fewer infections	49%	-71%
	Non-tunneled central line	3	0	0.00	Fewer infections		
	Other	0	0		n/a n/a		
	All	759	2	0.26	Statistically fewer infections		+95%
	Fistula	599	1	0.17	Fewer infections	47%	-3%
Woodburn	Graft	44	0	0.00	Fewer infections	50%	
	Any CVC	114	1	0.88	Fewer infections	27%	
	Tunneled central line	114	1	0.88	Fewer infections	30%	
	Non-tunneled central line	0	0		n/a n/a		
	Other	2	0	0.00	n/a n/a		

Health care worker influenza vaccination in hospitals, ambulatory surgical centers and skilled nursing facilities: 2014–2015 influenza season

Immunization of health care workers (HCW) is a critical weapon in the fight against influenza virus infection, which causes thousands of hospitalizations and deaths annually, disproportionately impacting vulnerable populations. ¹¹ Infected HCW can inadvertently transmit influenza virus to patients and each other. Oregon has gradually added requirements for mandatory reporting of vaccination rates in health care facilities and has worked to build awareness through widespread educational campaigns.

The U.S. Office of Disease Prevention and Health Promotion has set a series of <u>Healthy People (HP)</u> goals for 2015 and 2020, which includes target rates of HCW vaccination. In aggregate, Oregon hospitals met the 2015 Healthy People target rate of 75% HCW vaccination in both the 2013–2014 and 2014–2015 influenza seasons. Although there were slight increases in rates of HCW vaccination for ambulatory surgical centers and skilled nursing facilities, neither met the 2015 Healthy People target (Figure 13).

Figure 13. Influenza vaccination rates for all health care workers (HCW) by influenza season and health care facility type





What can providers do to increase rates of HCW influenza vaccination?

- ✓ Get vaccinated at the beginning of every influenza season
- ✓ Encourage all coworkers, including those not employed by the facility (e.g., contractors, volunteers, etc.), to get vaccinated
- ✓ Participate in and encourage promotional strategies such as:
 - Mass vaccination fairs
 - Peer vaccination
 - No-cost vaccines
 - Incentive programs
 - Documentation of vaccination status for all HCP and requiring declination forms

CDC information and guidance:

www.cdc.gov/flu/healthcareworkers.htm

Table 17. Aggregate HCW influenza vaccination rate data for the 2014–2015 influenza season for hospitals, ambulatory surgical centers and skilled nursing facilities stratified by HCW type.

Facility and worker type	Total number of HCW eligible for vaccination*	Aggregate rate of influenza vaccination among eligible HCW	Aggregate rate of influenza vaccine declination by eligible HCW	Aggregate rate of unknown vaccination status among eligible HCW	Change in rate of HCW influenza vaccination since 2013
Hospitals					
All health care worker (HCW)	92,648	79%	9%	13%	+3%
Employees	69,637	84%	10%	5%	+1%
Independent practitioners	9,398	58%	3%	40%	0%
Other contractors	1,404	39%	2%	59%	-29%
Students/Volunteers	12,209	67%	5%	28%	+3%
Ambulatory surgical centers					
All HCW	5,039	70%	16%	14%	+4%
Employees	3,026	70%	20%	10%	-1%
Independent practitioners	1,817	70%	9%	21%	+11%
Other contractors	102	61%	23%	17%	+205%
Students/Volunteers	93	78%	4%	17%	+16%
Skilled nursing facilities					
All HCW	15,749	57%	16%	26%	+2%
Employees	13,497	61%	18%	20%	+5%
Independent practitioners	327	54%	5%	41%	+35%
Other contractors	339	57%	9%	34%	0%
Students/Volunteers	1,586	25%	1%	74%	-24%

^{*} Includes total number of health care worker (HCW), including employees, licensed independent practitioners, other contractors, students and volunteers without documented medical contraindication for influenza vaccination

Health care worker vaccination data

Influenza vaccination rates for health care workers during the 2014–2015 influenza season varied by worker type (Table 17). Other contractors and students or volunteers were among the groups with the lowest rates. Of note, for certain types of HCWs, low vaccination rates were driven by the high proportion of workers with unknown vaccination status, suggesting documentation of vaccination status may be the first step towards improving rates (e.g., for independent practitioners and other contractors in hospitals and for students or volunteers in skilled nursing facilities).

Facility-specific tables

Tables 18–20 show facility-specific vaccination, declination and unknown status rates of for all HCW combined. Additionally, there are two columns designating each facility as having met or not having met the Healthy People 2015 (HP2015) and 2020 (HP2020) goals of 75% and 90%, respectively, for HCW vaccination. The last column of the tables includes number of additional HCWs needed to vaccinate to reach the HP2020 target of 90%. Figures 14–16 list vaccination rates for hospitals, ambulatory surgical centers and skilled nursing facilities from highest to lowest.

Table 18. Health care worker (HCW) influenza vaccination rates, rates of declination and rates of unknown vaccination status for the 2014–2015 influenza season: hospitals (n=62)

Facility name	# HCW eligible for influenza vaccine*	Rate of influenza vaccination for eligible HCW [†]	Rate of vaccine declination by eligible HCW	Rate of unknown vaccination status for eligible HCW	Change in vaccination rate since last season	Met HP2015 target (75%)	Met HP2020 target (90%)	Additional HCW needed to vaccinate to reach HP2020 [§]
Adventist Medical Center	2,480	84%	12%	4%	+2%	V	X	161
Asante Rogue Regional Medical Center	3,801	69%	17%	14%	0%	X	X	802
Asante Three Rivers Medical Center	1,343	78%	16%	6%	+7%	\	X	162
Ashland Community Hospital	516	58%	17%	25%	+30%	X	X	163
Bay Area Hospital	1,219	78%	20%	2%	-9%	\	X	143
Blue Mountain Hospital	224	53%	14%	33%	-33%	X	X	84
Cedar Hills Hospital	349	58%	15%	27%	‡	X	X	113
Columbia Memorial Hospital	577	83%	17%	0%	+2%	V	X	40
Coquille Valley Hospital District	258	51%	14%	35%	-25%	X	X	100
Cottage Grove Community Hospital	231	82%	1%	17%	-9%	V	X	19
Curry General Hospital	308	83%	3%	14%	+57%	\	X	22
Good Samaritan Regional Medical Center	2,928	75%	8%	17%	-7%	V	X	441
Good Shepherd Medical Center	804	87%	3%	10%	+13%	\	X	26
Grande Ronde Hospital	742	76%	20%	4%	-2%	\	X	102
Harney District Hospital	241	91%	7%	2%	+5%	\	\	
Kaiser Permanente Sunnyside Medical Center	2,317	72%	4%	23%	-2%	X	X	406
Kaiser Permanente Westside Medical Center	1013	78%	0%	22%	-3%	\	X	125
Lake District Hospital	328	43%	9%	48%	-7%	X	X	153
Legacy Emanuel Medical Center	5,585	83%	11%	6%	+8%	V	X	364
Legacy Good Samaritan Medical Center	3,186	82%	8%	10%	+12%	V	X	252
Legacy Meridian Park Medical Center	1,876	84%	9%	8%	+17%	V	X	119
Legacy Mount Hood Medical Center	1,308	81%	13%	6%	+12%	V	X	115
Lower Umpqua Hospital District	244	71%	26%	3%	+16%	X	X	46
McKenzie-Willamette Medical Center	1,093	65%	9%	26%	+2%	X	X	276
Mercy Medical Center	1,650	70%	16%	14%	+9%	X	X	327
Mid-Columbia Medical Center	648	71%	15%	14%	+2%	X	X	121
Oregon Health & Science University	1,2858	88%	6%	6%	+1%	V	X	251
Peace Harbor Hospital	335	93%	7%	0%	-1%	V	V	
Pioneer Memorial Hospital - Heppner	65	95%	3%	2%	+6%	V	V	
Pioneer Memorial (St. Charles – Prineville)	253	77%	17%	6%	+1%	V	X	32
Providence Hood River Memorial Hospital	586	70%	7%	23%	+1%	X	X	114
Providence Medford Medical Center	1,513	63%	12%	25%	+9%	X	X	408
Providence Milwaukie Hospital	673	73%	6%	21%	-3%	X	X	112

Facility name	# HCW eligible for influenza vaccine*	Rate of influenza vaccination for eligible HCW [†]	Rate of vaccine declination by eligible HCW	Rate of unknown vaccination status for eligible HCW	Change in vaccination rate since last season	Met HP2015 target (75%)	Met HP2020 target (90%)	Additional HCW needed to vaccinate to reach HP2020§
Providence Newberg Medical Center	708	79%	7%	15%	+7%	V	X	81
Providence Portland Medical Center	4,362	74%	8%	18%	+4%	X	X	703
Providence Seaside Hospital	449	84%	5%	11%	-4%	V	X	25
Providence St. Vincent Medical Center	4,781	76%	6%	18%	+5%	\	X	687
Providence Willamette Falls Medical Center	964	74%	9%	17%	+8%	X	X	157
Sacred Heart Medical Center - Riverbend	5,106	80%	3%	17%	-2%	V	X	531
Sacred Heart University District	1,045	67%	2%	30%	-13%	X	X	237
Salem Hospital	5,857	84%	5%	11%	-1%	V	X	332
Samaritan Albany General Hospital	1,455	75%	5%	20%	-16%	V	X	214
Samaritan Lebanon Community Hospital	1,048	86%	5%	9%	+9%	V	X	44
Samaritan North Lincoln Hospital	701	86%	4%	10%	+1%	V	X	31
Samaritan Pacific Communities Hospital	792	88%	5%	7%	+8%	V	X	14
Santiam Memorial Hospital	362	96%	2%	1%	+3%	V	V	
Shriner's	475	68%	1%	31%	-12%	X	X	106
Silverton Hospital	1,182	82%	15%	3%	+5%	V	X	95
Sky Lakes Medical Center	1,398	75%	11%	14%	+34%	V	X	211
Southern Coos Hospital and Health Center	175	55%	13%	32%	-11%	X	X	61
St. Alphonsus Medical Center - Baker City	253	83%	17%	0%	+14%	V	X	18
St. Alphonsus Medical Center - Ontario	664	80%	9%	11%	-13%	V	X	65
St. Anthony Hospital	519	97%	1%	2%	+14%	V	V	
St. Charles Medical Center - Bend	3,752	77%	12%	11%	+6%	V	X	482
St. Charles Medical Center - Madras	253	74%	18%	8%	-5%	X	X	40
St. Charles Medical Center - Redmond	654	78%	9%	13%	+4%	V	X	81
Tillamook County Hospital	645	64%	18%	18%	-22%	X	X	168
Tuality Community Hospital	1,959	67%	1%	33%	-26%	X	X	459
Vibra Specialty Hospital of Portland	258	96%	2%	2%	+16%	V	V	
Wallowa Memorial Hospital	177	91%	6%	3%	+5%	V	V	
West Valley Hospital	238	94%	6%	0%	-4%	V	V	
Willamette Valley Medical Center	864	83%	14%	3%	+3%	V	X	61

^{*} Includes total number of health care worker (HCW), including employees, licensed independent practitioners, other contractors, students and volunteers without documented medical contraindication for influenza vaccination

[†] Calculated as: (total number of HCW vaccinated at the facility + total number of HCW vaccinated elsewhere) / (total number of HCW eligible for influenza vaccination) ‡ Percentage change not calculated if vaccination rate was 0% during the 2013–2014 influenza season, or if hospital did not report influenza vaccination to OHA in 2013–2014 § Calculated as: (total HCW eligible for vaccination * 0.9) – (total number of HCW vaccinated at the facility + total number of HCW vaccinated elsewhere)

Figure 14. Oregon hospitals sorted by HCW influenza vaccination rates for the 2014–2015 influenza season (n=62)

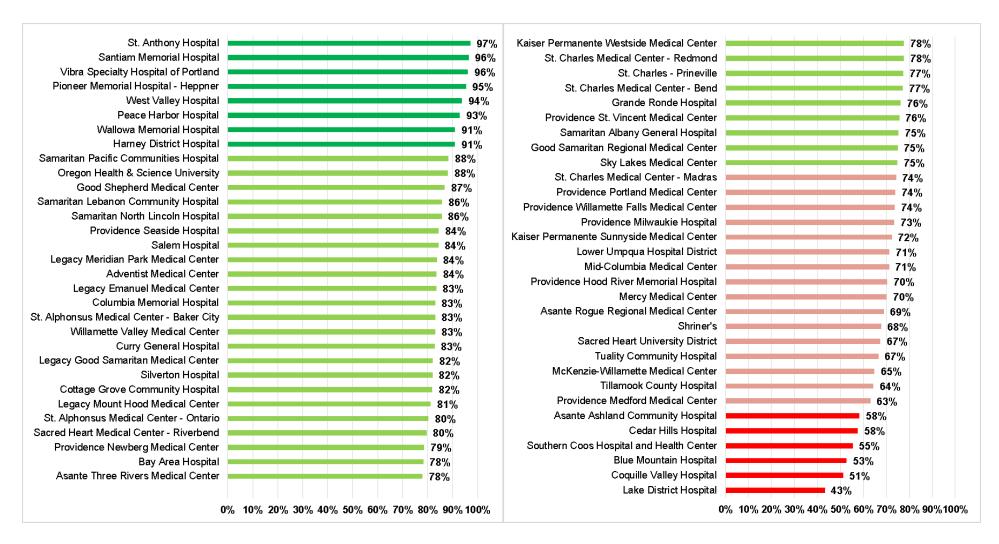




Table 19. Health care worker (HCW) influenza vaccination rates, rates of declination and rates of unknown vaccination status for the 2014–2015 influenza season: Oregon ambulatory surgical centers (n=85)

Facility name	# HCW eligible for influenza vaccine*	Rate of influenza vaccination for eligible HCW [†]	Rate of vaccine declination by eligible HCW	Rate of unknown vaccination status for eligible HCW	Change in vaccination rate since last season	Met HP2015 target (75%)	Met HP2020 target (90%)	Additional HCW needed to vaccinate to reach HP2020 [§]
Aesthetic Breast and Cosmetic Surgery Center	14	79%	21%	0%	-21%	V	X	2
Aesthetic Surgery Center of Eugene	24	67%	33%	0%	-33%	X	X	6
Alberty Surgery Center	84	71%	27%	1%	‡	X	X	16
Ambulatory Surgery Center at Tanasbourne	37	54%	30%	16%	+243%	X	X	13
Ashland Surgery Center	35	80%	9%	11%	-2%	V	X	4
Beaver Sports Medicine ASC	28	82%	18%	0%	+102%	V	X	2
Bend Surgery Center	192	89%	9%	2%	+16%	V	X	2
Capitol Surgery Center	14	93%	7%	0%	+2%	V	V	
Cascade Endoscopy Center	24	96%	4%	0%	+13%	V	✓	
Cascade Spine Center	29	48%	52%	0%	-35%	X	X	12
Cascade Surgery Center, LLC - Manzanita Ave	24	71%	29%	0%	+84%	X	X	5
Cascade Surgicenter, LLC	119	78%	22%	0%	+16%	V	X	14
Cataract and Laser Institute of Southern Oregon	56	63%	34%	4%	‡	X	X	15
Cedar Hills Surgery Center	8	38%	63%	0%	‡	X	X	4
Center for Cosmetic & Plastic Surgery	14	86%	14%	0%	-9%	V	X	1
Center for Specialty Surgery	99	65%	15%	20%	-30%	X	X	25
Columbia Gorge Surgery Center	16	13%	31%	56%	-81%	X	X	12
Columbia River Surgery Center	57	93%	7%	0%	+4%	V	V	
Cornell Surgery Center	48	69%	29%	2%	+30%	X	X	10
Croisan Ridge Surgery Center	30	33%	33%	33%	-51%	X	X	17
Doctors Park Surgery Center	55	82%	18%	0%	+241%	V	X	5
East Oregon Surgery Center	19	58%	21%	21%	-13%	X	X	6
East Portland Surgery Center	78	58%	24%	18%	-5%	X	X	25
Eastern Oregon Regional Surgery Center	10	60%	10%	30%	-25%	X	X	3
Eye Surgery Center - Albany	15	87%	13%	0%	+31%	V	X	1
Eye Surgery Institute	41	24%	73%	2%	+79%	X	X	27
EyeHealth Eastside Surgery Center	60	80%	20%	0%	+16%	V	X	6
Futures Outpatient Surgical Center	43	84%	14%	2%	+2%	V	X	3
Grants Pass Surgery Center, LLC	75	67%	15%	19%	+7%	X	X	18
Kaiser Permanente South Interstate	240	70%	11%	19%	-4%	X	X	48
Kaiser Permanente Skyline	303	79%	10%	11%	+4%	V	X	34
Kaiser Permanente Sunnybrook	454	71%	8%	21%	-6%	X	X	88

Facility name	# HCW eligible for influenza vaccine*	Rate of influenza vaccination for eligible HCW [†]	Rate of vaccine declination by eligible HCW	Rate of unknown vaccination status for eligible HCW	Change in vaccination rate since last season	Met HP2015 target (75%)	Met HP2020 target (90%)	Additional HCW needed to vaccinate to reach HP2020 [§]
Klamath Surgery Center	38	50%	11%	39%	-16%	X	X	15
Lane Surgery Center	32	75%	13%	13%	-14%	V	X	5
Laser & Surgical Eye Center, LLC	42	45%	52%	2%	+11%	X	X	19
Lovejoy Surgicenter	27	30%	30%	41%	-18%	X	X	16
McKenzie Surgery Center	102	73%	19%	9%	-13%	X	X	18
Meridian Center for Surgical Excellence	20	100%	0%	0%	+8%	V	V	
Middle Fork Surgery Center	20	65%	15%	20%	-16%	X	X	5
Mt. Scott Surgery Center	108	52%	2%	46%	+89%	X	X	41
North Bend Medical Center	59	85%	12%	3%	+17%	V	X	3
Northbank Surgical Center	153	55%	10%	35%	+14%	X	X	54
Northwest Ambulatory Surgery Center	95	74%	6%	20%	-16%	X	X	16
Northwest Center for Plastic Surgery, LLC	21	76%	10%	14%	-20%	V	X	3
Northwest Gastroenterology Clinic	44	86%	0%	14%	-6%	V	X	2
Northwest Spine and Laser Surgery Center	37	84%	16%	0%	+285%	V	X	2
Ontario Surgery Center	21	67%	14%	19%	+4%	X	X	5
Oregon Ear, Nose, and Throat Surgery Center,	40	45%	10%	45%	-39%	X	X	18
Oregon Endoscopy Center, LLC	40	93%	8%	0%	+8%	V	V	
Oregon Eye Surgery Center, Inc.	49	61%	35%	4%	-5%	X	X	14
Oregon Outpatient Surgery Center	101	73%	21%	6%	+1%	X	X	17
Oregon Surgicenter	35	86%	14%	0%	+6%	V	X	2
Pacific Cataract & Laser Institute	10	90%	10%	0%	+96%	V	V	
Pacific Cataract and Laser Institute	12	75%	25%	0%	-18%	V	X	2
Pacific Digestive Endoscopy Center	8	38%	63%	0%	-20%	X	X	4
Pacific Surgery Center	24	75%	25%	0%	0%	V	X	4
Pearl SurgiCenter	30	80%	20%	0%	+83%	V	X	3
Petroff Center	17	41%	41%	18%	-31%	X	X	8
Redmond Surgery Center, LLC	36	56%	44%	0%	+48%	X	X	12
River Road Surgery Center	39	74%	26%	0%	0%	X	X	6
RiverBend Ambulatory Surgery Center	174	56%	1%	43%	-44%	X	X	59
Rogue Valley Surgery Center, LLC	9	33%	67%	0%	‡	X	X	5
Rush Surgery Center	13	62%	0%	38%	‡	X	X	4
Salem Endoscopy Center	83	95%	5%	0%	-2%	V	V	
Salem Laser and Surgery Center	26	92%	8%	0%	+9%	V	V	
Samaritan Endoscopy Center	27	81%	19%	0%	-1%	V	X	2

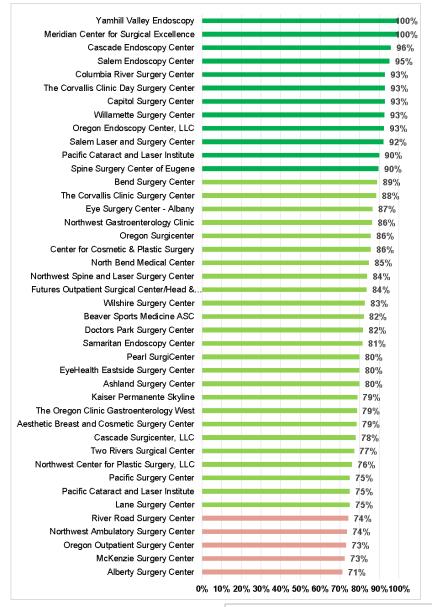
Facility name	# HCW eligible for influenza vaccine*	Rate of influenza vaccination for eligible HCW [†]	Rate of vaccine declination by eligible HCW	Rate of unknown vaccination status for eligible HCW	Change in vaccination rate since last season	Met HP2015 target (75%)	Met HP2020 target (90%)	Additional HCW needed to vaccinate to reach HP2020 [§]
Slocum Surgery center	73	42%	0%	58%	-49%	X	X	35
South Coast Surgery	30	50%	43%	7%	-48%	X	X	12
South Portland Surgical Center, LLC	61	52%	8%	39%	-46%	X	X	23
Spine Surgery Center of Eugene	39	90%	8%	3%	+20%	V	V	0
Surgery Center of Southern Oregon	175	63%	22%	15%	+14%	X	X	48
The Corvallis Clinic Day Surgery Center	14	93%	7%	0%	+16%	V	V	
The Corvallis Clinic Surgery Center	95	88%	6%	5%	+15%	V	X	2
The Oregon Clinic Gastroenterology East	73	64%	7%	29%	-28%	X	X	19
The Oregon Clinic Gastroenterology South	129	67%	26%	7%	+16%	X	X	30
The Oregon Clinic Gastroenterology West	75	79%	8%	13%	-6%	V	X	9
The Portland Clinic Surgery Centers	46	61%	39%	0%	+24%	X	X	13
Two Rivers Surgical Center	44	77%	16%	7%	+16%	V	X	6
Valley Plastic Surgery	11	64%	36%	0%	-9%	X	X	3
Vision Surgery and Laser Center	33	55%	45%	0%	-22%	X	X	12
Westside Surgery Center	35	63%	17%	20%	+26%	X	X	10
Willamette Surgery Center	83	93%	7%	0%	+15%	V	V	
Willamette Valley Eye SurgiCenter	22	45%	55%	0%	-9%	X	X	10
Wilshire Surgery Center	52	83%	15%	2%	+512%	V	X	4
Yamhill Valley Endoscopy	11	100%	0%	0%	+13%	V	V	

^{*} Includes total number of health care worker (HCW), including employees, licensed independent practitioners, other contractors, students and volunteers without documented medical contraindication for influenza vaccination

[†] Calculated as: (total number of HCW vaccinated at the facility + total number of HCW vaccinated elsewhere) / (total number of HCW eligible for influenza vaccination)

[‡] Percentage change not calculated if vaccination rate was 0% during the 2013–2014 influenza season, or if ASC did not report influenza vaccination to OHA in 2013–2014 § Calculated as: (total HCW eligible for vaccination * 0.9) – (total number of HCW vaccinated at the facility + total number of HCW vaccinated elsewhere)

Figure 15. Oregon ambulatory surgical centers sorted by HCW influenza vaccination rates for the 2014–2015 influenza season (n=85)



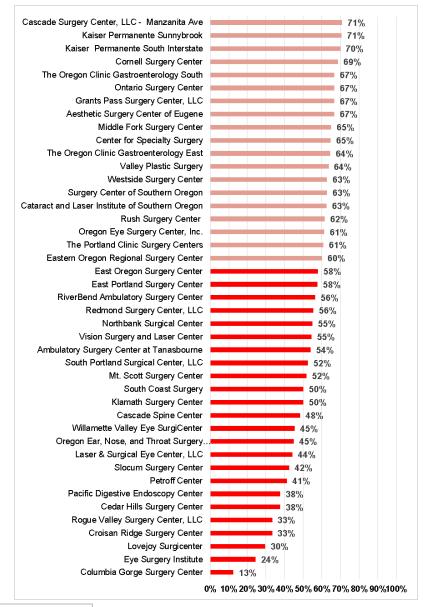


Table 20. Health care worker (HCW) influenza vaccination rates, rates of declination, and rates of unknown vaccination status for the 2014–2015 influenza season: Oregon skilled nursing facilities (n=137)

Facility name	# HCW eligible for influenza vaccine*	Rate of influenza vaccination for eligible HCW [†]	Rate of vaccine declination by eligible HCW	Rate of unknown vaccination status for eligible HCW	Change in vaccination rate since last season	Met HP2015 target (75%)	Met HP2020 target (90%)	Additional HCW needed to vaccinate to reach HP2020 [§]
Aidan Senior Living at Reedsport	41	71%	2%	27%	-10%	X	X	8
Avamere Court at Keizer	140	61%	39%	0%	10%	X	X	41
Avamere Crestview of Portland	125	33%	8%	59%	+74%	X	X	72
Avamere Health Services of Rogue Valley	92	46%	53%	1%	+21%	X	X	41
Avamere Medford at Three Fountains	56	82%	9%	9%	+53%	V	X	4
Avamere Rehabilitation of Beaverton	110	39%	0%	61%	-46%	X	X	56
Avamere Rehabilitation of Clackamas	62	74%	26%	0%	+34%	X	X	10
Avamere Rehabilitation of Coos Bay	68	78%	15%	7%	+20%	V	X	8
Avamere Rehabilitation of Eugene	98	18%	82%	0%	-76%	X	X	70
Avamere Rehabilitation of Hillsboro	105	52%	19%	29%	+217%	X	X	40
Avamere Rehabilitation of King City	109	37%	0%	63%	-27%	X	X	58
Avamere Rehabilitation of Lebanon	100	26%	0%	74%	-35%	X	X	64
Avamere Rehabilitation of Oregon City	92	21%	5%	74%	-50%	X	X	64
Avamere Riverpark Of Eugene	178	44%	18%	38%	+46%	X	X	82
Avamere Transitional Care at Sunnyside	95	33%	0%	67%	-49%	X	X	55
Avamere Twin Oaks of Sweet Home	68	24%	16%	60%	-52%	X	X	45
Avamere of Junction City	54	70%	15%	15%	-1%	X	X	11
Avamere of Newport Rehabilitation and Specialty Care	56	41%	4%	55%	-45%	X	X	27
Baycrest Village	231	94%	6%	0%	+18%	V	V	
Bend Transitional Care	71	61%	7%	32%	35%	X	X	21
Blue Mountain Care Center	38	89%	11%	0%	-4%	V	X	0
Care Center East	89	73%	27%	0%	+22%	X	X	15
Cascade Manor	57	82%	18%	0%	-3%	V	X	4
Cascade Terrace	136	53%	29%	18%	0%	X	X	50
Cascade View Nursing and Alzheimer's	66	27%	36%	36%	-31%	X	X	41
Chehalem Health and Rehabilitation	73	66%	27%	7%	+127%	X	X	18
Clatsop Care Center	100	79%	21%	0%	+24%	V	X	11
Coast Fork Nursing Center	65	74%	26%	0%	0%	X	X	11
Columbia Basin Care Facility	123	52%	17%	31%	-32%	X	X	47
Columbia Care Center	57	61%	39%	0%	-11%	X	X	16

Facility name	# HCW eligible for influenza vaccine*	Rate of influenza vaccination for eligible HCW [†]	Rate of vaccine declination by eligible HCW	Rate of unknown vaccination status for eligible HCW	Change in vaccination rate since last season	Met HP2015 target (75%)	Met HP2020 target (90%)	Additional HCW needed to vaccinate to reach HP2020§
Cornerstone Care Option	82	72%	28%	0%	+24%	X	X	15
Corvallis Manor Nursing and Rehabilitation Center	147	62%	17%	21%	-5%	X	X	41
Creswell Health and Rehabilitation Center	63	68%	32%	0%	-20%	X	X	14
Dallas Retirement Village	338	31%	2%	67%	+19%	X	X	200
East Cascade Retirement Community	4	50%	50%	0%	-30%	X	X	2
Empres Hillsboro	131	15%	4%	82%	+54%	X	X	99
Fair View Transitional Health Center	86	59%	37%	3%	+51%	X	X	26
Fernhill Estates	29	72%	28%	0%	+17%	X	X	5
Forest Grove Rehabilitation and Care Center	85	49%	0%	51%	-21%	X	X	35
French Prairie Nursing and Rehab Center	95	81%	17%	2%	+5%	V	X	9
Friendsview Manor	175	49%	10%	41%	-17%	X	X	72
GSS Fairlawn Village	179	35%	2%	63%	-28%	X	X	99
Gateway Care & Retirement	87	77%	23%	0%	+51%	V	X	11
Glisan Care Center	85	93%	7%	0%	-3%	V	V	
Good Samaritan Curry Village	90	73%	27%	0%	+54%	X	X	15
Good Samaritan Society Eugene Village	70	60%	34%	6%	-6%	X	X	21
Gracelen Terrace	124	100%	0%	0%	0%	V	V	
Green Valley Nursing and Rehabilitation Center	135	90%	10%	0%	+38%	V	V	
Health Care at Foster Creek	188	90%	6%	3%	+217%	V	V	
Hearthstone Nursing & Rehabilitation Center	118	72%	28%	0%	-16%	X	X	21
Highland House Nursing and Rehabilitation Center	154	57%	43%	0%	-10%	X	X	51
Hillside Heights	132	23%	22%	55%	-44%	X	X	89
Holgate Community	146	38%	14%	48%	-24%	X	X	76
Holladay Park Plaza	216	52%	29%	19%	+38%	X	X	82
Hood River Care Center	91	48%	1%	51%	-34%	X	X	38
Independence Health and Rehab	84	20%	4%	76%	-78%	X	X	59
La Grande Post Acute Rehab	68	56%	38%	6%	-18%	X	X	23
Lakeview Gardens	33	79%	18%	3%	‡	V	X	4
Laurel Hill Nursing and Rehab Center	21	43%	19%	38%	-43%	X	X	10
Laurelhurst Village	220	35%	14%	51%	+25%	X	X	120
Lawrence Convalescent Center	14	64%	29%	7%	+32%	X	X	4
Lifecare Center McMinnville	108	77%	22%	1%	-8%	V	X	14
Lifecare Center of Coos Bay	98	59%	31%	10%	+44%	X	X	30

Facility name	# HCW eligible for influenza vaccine*	Rate of influenza vaccination for eligible HCW [†]	Rate of vaccine declination by eligible HCW	Rate of unknown vaccination status for eligible HCW	Change in vaccination rate since last season	Met HP2015 target (75%)	Met HP2020 target (90%)	Additional HCW needed to vaccinate to reach HP2020§
Linda Vista Nursing & Rehabilitation	108	33%	38%	29%	+8%	X	X	61
Marian Estates	138	61%	33%	7%	+30%	X	X	40
Marquis Autumn Hills	111	73%	23%	4%	+22%	X	X	19
Marquis Centennial	195	95%	5%	0%	+4%	V	V	
Marquis Forest Grove	71	79%	21%	0%	-4%	V	X	8
Marguis Mt Tabor	192	55%	31%	14%	+28%	X	X	67
Marquis Newberg	90	87%	7%	7%	-3%	V	X	3
Marguis Oregon City Post Acute Rehab	96	67%	15%	19%	+424%	X	X	22
Marquis Piedmont	129	75%	19%	5%	+6%	V	X	19
Marquis Plum Ridge	128	48%	0%	52%	-5%	X	X	54
Marquis Post Acute Rehab at Mill Park	78	62%	38%	0%	‡	X	X	22
Marquis Post Acute Rehabilitation at Hope Village	118	56%	8%	36%	-13%	X	X	40
Marquis Silver Gardens	38	100%	0%	0%	+3%	V	V	
Marquis Springfield	217	80%	20%	0%	+73%	V	X	22
Marquis Vermont Hills	98	95%	5%	0%	+19%	V	V	
Marquis Wilsonville	123	85%	15%	0%	+74%	V	X	6
Mary's Woods at Marylhurst	383	44%	6%	49%	-13%	X	X	175
Maryville Nursing Home	275	48%	6%	46%	-15%	X	X	117
Meadow Park	68	72%	21%	7%	-7%	X	X	12
Mennonite Home	215	63%	1%	35%	+9%	X	X	58
Milton Freewater Health and Rehabilitation Center	64	64%	36%	0%	-28%	X	X	17
Milwaukie Convalescent Center	131	28%	12%	60%	-11%	X	X	81
Mirabella Portland	249	43%	24%	34%	-2%	X	X	118
Molalla Manor Care Center	73	95%	5%	0%	+3%	V	V	
Myrtle Point Care Center	59	56%	15%	29%	-4%	X	X	20
Nehalem Valley Care Center	50	92%	8%	0%	+13%	V	V	
Ochoco Care Center	52	81%	19%	0%	-2%	V	X	5
Oregon City Health Care Center	53	62%	38%	0%	+43%	X	X	15
Oregon Veterans' Home	272	63%	23%	15%	+35%	X	X	75
Pacific Health & Rehabilitation	75	69%	29%	1%	+32%	X	X	16
Park Forest Care Center	65	49%	15%	35%	+10%	X	X	27
Pilot Butte Rehab	50	60%	28%	12%	-1%	X	X	15
Pioneer Nursing Home	60	0%	0%	100%	-100%	X	X	54
Porthaven Care Center	112	93%	6%	1%	+63%	V	V	

Facility name	# HCW eligible for influenza vaccine*	Rate of influenza vaccination for eligible HCW [†]	Rate of vaccine declination by eligible HCW	Rate of unknown vaccination status for eligible HCW	Change in vaccination rate since last season	Met HP2015 target (75%)	Met HP2020 target (90%)	Additional HCW needed to vaccinate to reach HP2020 [§]
Portland Health and Rehab	76	74%	26%	0%	+3%	X	X	12
Presbyterian Community Care Center	137	47%	3%	50%	-6%	X	X	58
Prestige Care & Rehab of Menlo Park	100	47%	53%	0%	-49%	X	X	43
Prestige Care and Rehab of Reedwood	66	83%	12%	5%	+71%	V	X	4
Prestige Oakwood	60	43%	57%	0%	-12%	X	X	28
Prestige Post Acute Care & Rehab Center -Gresham	69	81%	19%	0%	‡	V	X	6
Providence Benedictine	326	75%	12%	13%	+56%	V	X	50
Providence Child Center	256	77%	2%	22%	+13%	V	X	34
Redmond Health Care Center	61	41%	38%	21%	-46%	X	X	30
Regency Albany	109	39%	13%	49%	-54%	X	X	56
Regency Florence	79	68%	32%	0%	-18%	X	X	17
Regency Gresham Nursing and Rehabilitation Center	155	58%	15%	27%	-10%	X	X	50
Regency Hermiston	100	77%	23%	0%	+24%	V	X	13
Robison Jewish Health Center	435	44%	3%	53%	-30%	X	X	199
Rogue Valley Manor	88	25%	0%	75%	-1%	X	X	57
Rose City Nursing Home	39	82%	18%	0%	+420%	V	X	3
Rose Haven Nursing Center	100	81%	11%	8%	+3%	V	X	9
Rose Linn Care Center	95	26%	40%	34%	-36%	X	X	61
Rose Schnitzer Manor	363	23%	3%	74%	‡	X	X	245
Rose Villa Senior Living	180	62%	14%	24%	-3%	X	X	50
Royale Gardens Health and Rehabilitation Center	195	62%	29%	10%	+17%	X	X	56
Salem Transitional Care	80	89%	4%	8%	‡	V	X	1
Sheridan Care Center	92	51%	14%	35%	+7%	X	X	36
Sherwood Park Nursing & Rehab Center	123	33%	15%	53%	-14%	X	X	71
South Hills Rehabilitation Center	117	97%	3%	0%	+5%	V	V	
The Dalles Health and Rehabilitation	56	63%	27%	11%	-30%	X	X	15
The Pearl	148	28%	5%	67%	+21%	X	X	91
The Village at Hillside	159	0%	0%	100%	‡	X	X	143
Tierra Rose Care Center	145	69%	26%	5%	+3%	X	X	31
Timberview Care Center	97	98%	2%	0%	0%	V	✓	
Town Center Village Rehab	49	76%	24%	0%	+3%	V	X	7
Trinity Mission Health & Rehab of Portland, LLC	39	46%	54%	0%	1+06%	X	X	17
Umpqua Valley Nursing and Rehabilitation Center	121	64%	27%	9%	-1%	X	X	32
Valley West Health Care Center	150	75%	24%	1%	+49%	✓	X	23
Valley West Health Care Center Village Health Care	110	47%	53%	0%	+34%	X	X	47

Facility name	# HCW eligible for influenza vaccine*	Rate of influenza vaccination for eligible HCW [†]	Rate of vaccine declination by eligible HCW	Rate of unknown vaccination status for eligible HCW	Change in vaccination rate since last season	Met HP2015 target (75%)	Met HP2020 target (90%)	Additional HCW needed to vaccinate to reach HP2020§
Village Manor	63	84%	16%	0%	+201%	V	X	4
West Hills Health and Rehab	181	47%	4%	49%	-36%	X	X	78
Willamette View Health Center	110	45%	0%	55%	+22%	X	X	49
Willowbrook Terrace	72	92%	8%	0%	+20%	V	V	
Windsor Health and Rehabilitation	61	80%	20%	0%	+25%	V	X	6

^{*} Includes total number of health care worker (HCW), including employees, licensed independent practitioners, other contractors, students and volunteers without documented medical contraindication for influenza vaccination

[†] Calculated as: (total number of HCW vaccinated at the facility + total number of HCW vaccinated elsewhere) / (total number of HCW eligible for influenza vaccination)

[‡] Percentage change not calculated if vaccination rate was 0% during the 2013–2014 influenza season, or if the skilled nursing facility did not report influenza vaccination to OHA in 2013–2014 § Calculated as: (total HCW eligible for vaccination * 0.9) – (total number of HCW vaccinated at the facility + total number of HCW vaccinated elsewhere)

Figure 16. Skilled nursing facilities sorted by HCW influenza vaccination rates for the 2014–2015 influenza season (n=137)

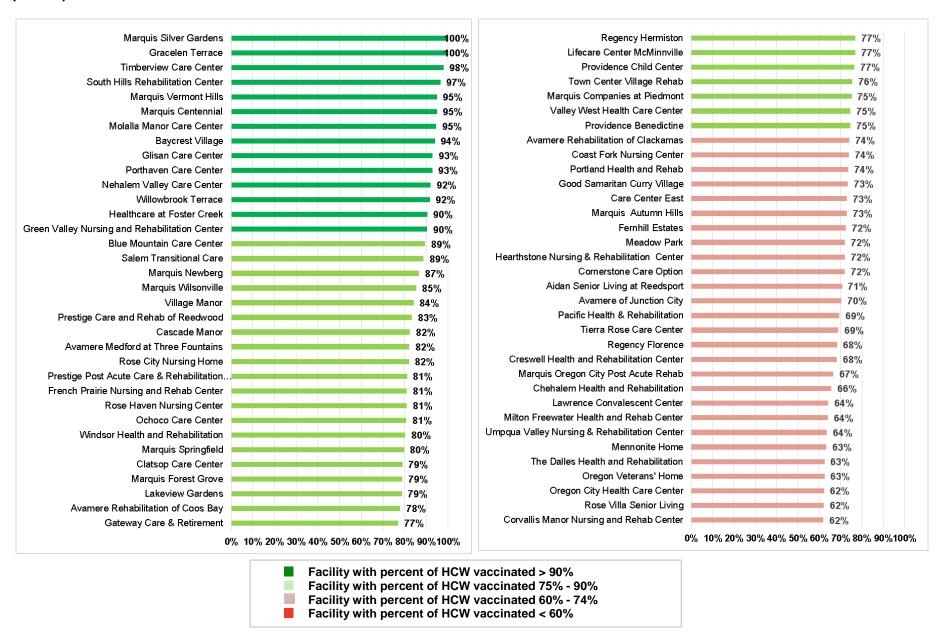
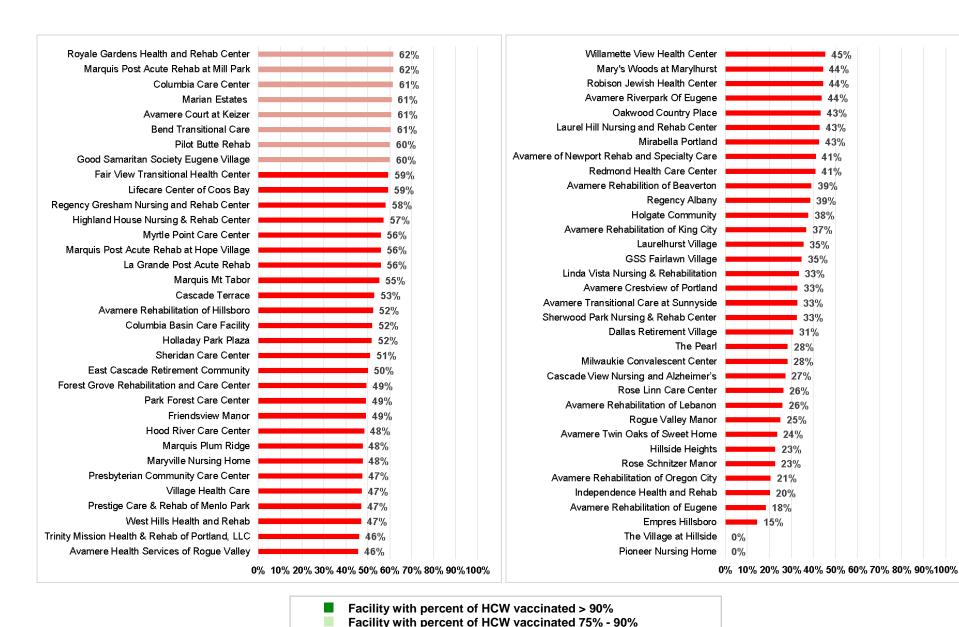


Figure 16 (continued). Skilled nursing facilities sorted by HCW influenza vaccination rates for the 2014–2015 influenza season (n=137)



Facility with percent of HCW vaccinated 60% - 74% Facility with percent of HCW vaccinated < 60%

- 1. Magill SS, Edwards JR, Bamberg W, et al. Multistate Point-Prevalence Survey of Healthcare–Associated Infections. № N Engl J Med 2014; 370:1198–208.
- 2. Scott RD II. The Direct Costs of Healthcare-Associated Infections in U.S. Hospitals and the Benefits of Prevention. Centers for Disease Control and Prevention. March 2009.
- 3. O'Grady NP, Alexander M, Burns LA, et al. Guidelines for the prevention of intravascular catheter-related infections. Am J Infect Control 2011;39(4 Suppl 1):S1–34.
- 4. Pronovost P, Needham D, Berenholtz S, et al. An intervention to decrease catheter-related bloodstream infections in the ICU. N Engl J Med 2006; 355:2725–32.
- 5. Milstone AM, Reich NG. Catheter dwell time and CLABSIs in neonates with PICCs: a multicenter cohort study. Pediatrics 2013;132:e1609–15.
- 6. Fisher D, Cochran KM, Provost LP, et al. Reducing central line-associated bloodstream infections in North Carolina NICUs. Pediatrics. 2013; 132:e1664–71.
- 7. Gould CV, Umscheid CA, Agarwal RK, et al. Healthcare Infection Control Practices Advisory Committee (HICPAC): guideline for prevention of catheter-associated urinary tract infections, 2009. www.cdc.gov/hicpac/cauti/001_cauti.html.
- 8. Vital signs: Making Health Care Safer: preventing *Clostridium difficile* infections. MMWR 2012;61:157–62.
- 9. Dubberke ER, Carling P, Carrico R, et al. Strategies to prevent *Clostridium difficile* infections in acute care hospitals: 2014 Update. Infect Control Hosp Epidemiol 2014; 35:628–45.
- 10. Anderson DJ, Podgorny K, Berrios-Torres SI, et al. Strategies to prevent surgical site infections in acute care hospitals: 2014 Update. Infect Control Hosp Epidemiol 2014 35:605–27.
- 11. Centers for Disease Control and Prevention. Estimates of deaths associated with season influenza, United States, 1976-2007. MMWR 2010; 59:1057-62.

Appendix I. Required HAI reporting in Oregon, by year and facility type: 2009–2015

	2009	2010	2011	2012	2013	2014	2015
Hospitals							
CLABSI: ICUs	X	Х	Х	Х	Х	Х	Х
CLABSI: neonatal ICUs			Х	Х	Х	Х	Х
CLABSI: wards							Х
CAUTI: wards						Х	Х
CAUTI: wards							Х
HO-CDI: facility-wide				Х	Х	Х	Х
HO-MRSA: facility-wide						Х	Х
SSI: CBGB	X	Х	Х	Х	Х	Х	Х
SSI: LAM			X	Х	Х	Х	Х
SSI: COLO			X	Х	Х	Х	Х
SSI: HYST			Х	Х	Х	Х	Х
SSI: HPRO			Х	Х	Х	Х	Х
SSI: KPRO	X	Х	Х	Х	Х	Х	Х
HCW influenza vaccination		Х	Х	Х	Х	Х	Х
Dialysis facilities					Х	Х	Х
Dialysis events						Х	Х
HCW influenza vaccination							Х
Ambulatory surgical centers							
HCW influenza vaccination			Х	X	Х	Х	Х
Skilled nursing facilities							
HCW influenza vaccination			Х	Х	Х	Х	Х

This document can be provided upon request in an alternate format for individuals with disabilities or in a language other than English for people with limited English skills. To request this publication in another format or language, contact the Public Health Division at 503-673-1111 or 711 for TTY.



PUBLIC HEALTH DIVISION 971-673-1111 (phone) 971-673-1100 (fax)

https://public.health.oregon.gov/DiseasesConditions/ CommunicableDisease/HAI/Pages/index.aspx