

# Healthcare Worker Influenza Vaccination in Oregon

Monika E. Samper, RN  
Healthcare-Associated Infections Program  
August 23, 2016



## HAI Program at OHA

- Surveillance and reporting
- Outbreak response
- Prevention



## Objectives:

- Overview of HCW flu vax reporting
  - Oregon law
  - Who reports and how?
- HCW influenza vaccination data
  - Vaccination rates over time and by facility type
  - Benchmarking
  - Vaccine promotion strategies
- Next steps
  - Interactive mapping
  - Promotion efforts



3

## Mandatory Reporting: Oregon

- House Bill 2524 (2007)
  - Created Oregon Mandatory HAI Program
  - Activities stipulated in OR Admin Rules (OARs)
  - Advisory Committee created in 2008
- National Healthcare Safety Network (NHSN) and SurveyMonkey selected for reporting



4

# HAI Reporting Poster: 2016

## OREGON PUBLIC HEALTH DIVISION REPORTING FOR HEALTHCARE-ASSOCIATED INFECTIONS

Local health department information  
For a list of local health department phone numbers go to [www.healthoregon.org/indirectory](http://www.healthoregon.org/indirectory)

House Bill 2524 established a mandatory Healthcare-Associated Infections (HAI) Reporting Program. The program was created to raise awareness of HAIs, to promote a transparent means of informing consumers, and to aid healthcare facilities in preventing HAIs ([healthoregon.org/hai](http://healthoregon.org/hai)). The following table compares the Oregon HAI reporting requirements and the Centers for Medicare & Medicaid Services (CMS) Prospective Payment System requirements.

HAI MEASUREMENT TYPE	HOSPITALS AND LONG-TERM CARE HOSPITALS*	
	CMS REQUIREMENTS <sup>1</sup>	OREGON REQUIREMENTS <sup>2</sup>
NRISK ANNUAL SURVEY	NRISK Annual Survey (2012)	NRISK Annual Survey (2009)
CLABSI	Hospitals: All adult, pediatric and neonatal ICUs (2011) Adult and pediatric medical, surgical and medical/surgical wards (2012) LTACH: All adult and pediatric ICUs and wards (Oct. 2012)	Adult medical, surgical and medical/surgical ICUs (2009) Neonatal ICUs (2011) All adult, pediatric and neonatal ICUs and adult and pediatric medical, surgical and medical/surgical wards (2011)
SSI	Celex surgery, inpatient (2012) Medicinal hysterectomy, inpatient (2012)	Celex surgery, inpatient (2011) Abdominal hysterectomy, inpatient (2011) Coronary Artery Bypass Graft Surgery, inpatient (2009) (CRUI only as of 2011) Knee prosthesis procedure, inpatient (2011) Hip prosthesis procedure, inpatient (2011) Laminectomy, inpatient (2011)
CAUTI	Hospitals: All adult and pediatric ICUs (2012) Adult and pediatric medical, surgical, medical/surgical, and inpatient rehabilitation wards (2012) LTACH: Adult and pediatric ICUs and wards (Oct. 2012)	All adult and pediatric ICUs (2012) Adult and pediatric medical, surgical, medical/surgical, and inpatient rehabilitation wards (2012)
C. DIFFICILE LAB ID EVENT	Hospitals: Facility-wide, inpatient (2012) – excluding neonatal and well-baby LTACH: Facility-wide, inpatient (2012)	Facility-wide, inpatient (2012) – excluding neonatal and well-baby
MRSA BACTEREMIA LAB ID EVENT	Hospitals: Facility-wide, inpatient (2012) LTACH: Facility-wide, inpatient (2012)	Facility-wide, inpatient (2012)

Acute Care

HEALTHCARE WORKER INFLUENZA VACCINATION	HEALTHCARE WORKER INFLUENZA VACCINATION
Hospitals: Inpatient (2013) and outpatient (2014) LTACH: Inpatient (2015) Inpatient Psychiatric Facilities (2015)	Hospitals: Inpatient (2009) and outpatient (2014) Inpatient Psychiatric facilities (2015)

<http://public.health.oregon.gov/DiseasesConditions/CommunicableDisease/ReportingCommunicableDisease/Documents/ReportingPosters/poster-hai.pdf>



# HAI Reporting Poster: 2016

HAI MEASUREMENT TYPE	LONG-TERM CARE FACILITIES		AMBULATORY SURGERY CENTERS		DIALYSIS FACILITIES	
	CMS REQUIREMENTS <sup>1</sup>	OREGON REQUIREMENTS <sup>2</sup>	CMS REQUIREMENTS <sup>1</sup>	OREGON REQUIREMENTS <sup>2</sup>	CMS REQUIREMENTS <sup>1</sup>	OREGON REQUIREMENTS <sup>2</sup>
ANNUAL SURVEY	N/A	Evidence-based elements of patient safety performance annual survey (2015)	N/A	Evidence-based elements of patient safety performance annual survey (2009)	N/A	N/A
HEALTHCARE WORKER INFLUENZA VACCINATION	N/A	Healthcare Worker Influenza Vaccination Survey (2010)	Healthcare Worker Influenza Vaccination Survey (Oct. 2014)	Healthcare Worker Influenza Vaccination Survey (2011)	Healthcare Worker Influenza Vaccination Survey (Oct. 2015)	Healthcare Worker Influenza Vaccination Survey (Oct. 2015)
DIALYSIS EVENT	N/A	N/A	N/A	N/A	Dialysis event (2012)	Dialysis event (2013)
OTHER	All minimum data set (MDS) elements required by the Skilled Nursing Facility Prospective Payment System	All minimum data set (MDS) elements including urinary tract infection in the last 30 days (2012)	N/A	N/A	N/A	N/A

HAI – Healthcare-associated infection    NHSN – National Healthcare Safety Network    CLABSI – Central line-associated bloodstream infection    SSI – Surgical site infection  
CAUTI – Catheter-associated urinary tract infection    MRSA – Methicillin-resistant *Staphylococcus aureus*    SCIP – Surgical Care Improvement Project

### ADDITIONAL MANDATORY REPORTING

#### Communication of Multidrug-resistant Organisms during Patient Transfer:

When a referring healthcare facility transfers or discharges a patient who is infected or colonized with a multidrug-resistant organism (MDRO) or pathogen requiring Transmission-based Precautions, transfer documentation must include written notification of the infection or colonization to the receiving facility.<sup>7</sup>

**Mandatory outbreak reporting:** Healthcare facilities and providers are required to report outbreaks of HAIs including MDROs of public health significance and common source outbreaks.<sup>8</sup>

Multidrug-resistant organism (MDRO): an organism that causes human disease that has acquired antibiotic resistance, as listed and defined in the *Centers for Disease Control and Prevention's Antibiotic Resistance Threats in the United States, 2013*. MDROs include but are not limited to:

- Methicillin-resistant *Staphylococcus aureus* (MRSA)
- Vancomycin-resistant *Enterococcus* (VRE)
- Carbapenem-resistant *Enterobacteriaceae* (CRE)
- Multidrug-resistant *Acinetobacter baumannii*
- Multidrug-resistant *Pseudomonas aeruginosa*
- Drug-resistant *Streptococcus pneumoniae*
- Other Gram-negative bacteria producing extended-spectrum beta-lactamases (ESBL),
- Toxin-producing *Clostridium difficile*

<http://public.health.oregon.gov/DiseasesConditions/CommunicableDisease/ReportingCommunicableDisease/Documents/ReportingPosters/poster-hai.pdf>



# OAR: 333-018-0127

333-018-0127

## Annual Influenza Summary

Each hospital, ASC, Dialysis facility, LTCF, and IRF must submit an annual survey to the Authority, no later than May 31, on a form prescribed by the Authority, regarding influenza vaccination of staff. Facilities must report at least the following information:

- (1) Number of staff with a documented influenza vaccination during the previous influenza season;
- (2) Number of staff with a documented medical contraindication to influenza vaccination during the previous influenza season;
- (3) Number of staff with a documented refusal of influenza vaccination during the previous influenza season; and
- (4) Facility assessment of influenza vaccine coverage of facility staff during the previous influenza season and plans to improve vaccine coverage of facility staff during the upcoming influenza season.

Stat. Auth.: ORS 442.420 & OL 2007, Ch. 838 | 1-6 and 12  
 Stats. Implemented: ORS 442.405 & OL 2007, Ch. 838 | 1-6 and 12  
 Hist.: PH 17-2014, f. & cert. ef. 6-9-14; PH 8-2015, f. & cert. ef. 3-24-15

[http://arcweb.sos.state.or.us/pages/rules/oars\\_300/oar\\_333/333\\_018.html](http://arcweb.sos.state.or.us/pages/rules/oars_300/oar_333/333_018.html)



# 2015-2016 HCW Influenza Vaccination Survey

**ATTACHMENT A**  
 Influenza Vaccination Surveillance  
 Collection Start Date: October 1, 2015; End Date: March 31, 2016

Facility Name: \_\_\_\_\_  
 Facility Address/City: \_\_\_\_\_  
 Name and Title of Person Completing Form: \_\_\_\_\_  
 Facility Type:  Hospital (including ambulatory care and long-term acute care)  
 Long-term Care Facility (including assisted living, adult nursing, and respite units)  
 Free-standing Ambulatory Surgical Center

The undersigned certifies that the information in this form is accurate and true to the best of their knowledge.  
 Signature of Person Completing Form: \_\_\_\_\_ Date: \_\_\_\_\_  
 Contact Information: Email: \_\_\_\_\_ Phone: \_\_\_\_\_

Record the number of healthcare personnel (HCP) for each category below for the influenza season being tracked.

*Vaccination type:	*Influenza subtype(s):	*Influenza Season*: 2015/2016	CMS ID# (optional):			
Influenza	Seasonal					
<b>PLEASE BE SURE THAT QUESTION 7 TOTAL OR QUESTIONS 2-6 IS THE SAME TOTAL PROVIDED IN QUESTION 1 FOR EACH CATEGORY OF HEALTHCARE WORKERS.</b>						
		<b>Employee HCP</b>	<b>Non-Employee HCP</b>			
		Employees (staff on facility payroll)	*Licensed independent practitioners: Physicians, advanced practice nurses, & physician assistants	*SALN students/trainees & volunteers	Other contract personnel (optional)	
<b>Demographic Information:</b> (Should be the same total provided in Question 1)						
1. Number of HCP who worked at the healthcare facility for at least 1 day between October 1 & March 31.						
<b>Healthcare Information:</b>						
2. Number of HCP who received an influenza vaccination at the healthcare facility since influenza vaccine became available this season?						
3. Number of HCP who provided a written report or documentation of influenza vaccination outside the healthcare facility since influenza vaccine became available this season?						
4. Number of HCP who have a medical contraindication* to the influenza vaccine.						
5. Number of HCP who declined to receive the influenza vaccine this season?						
6. Number of HCP with unknown vaccination status (do not use for questions 1 & 2 above) this season?						
<b>Total of Healthcare Information:</b> (Should be the same total provided in Question 1)						
7. The numbers reported in Questions 2 through 6 should add up to the denominator reported in Question 1 for each type of employee/non-employee.						

\* For the purpose of this survey, influenza subtype refers to whether seasonal or non-seasonal vaccine is used. Seasonal is the default and only correct choice.  
 \* For the purpose of this survey, a contraindication is defined as any of the following:  
 - Having had meningitis, encephalitis, Guillain-Barre syndrome, or other neurological conditions in the past 6 weeks.  
 - Having had myasthenia gravis in the past 6 weeks.  
 - Having had severe allergic reactions to any component of the vaccine, having had an allergic reaction to influenza vaccine (any), medical contraindications also include active or a history of autoimmune disorders.



## Healthy People Goals

- Office of Disease Prevention and Health Promotion establishes indicators
- Healthcare worker (HCW) influenza vaccination is among the targets
  - 75% by 2015
  - 90% by 2020
- Oregon Report
  - Benchmark (Yes/No)
  - Progress towards goal



9

## HCW Flu Vaccination

Oregon Public Health

>> Oregon Health Care Worker  
Influenza Vaccination Annual Report:  
2014-2015



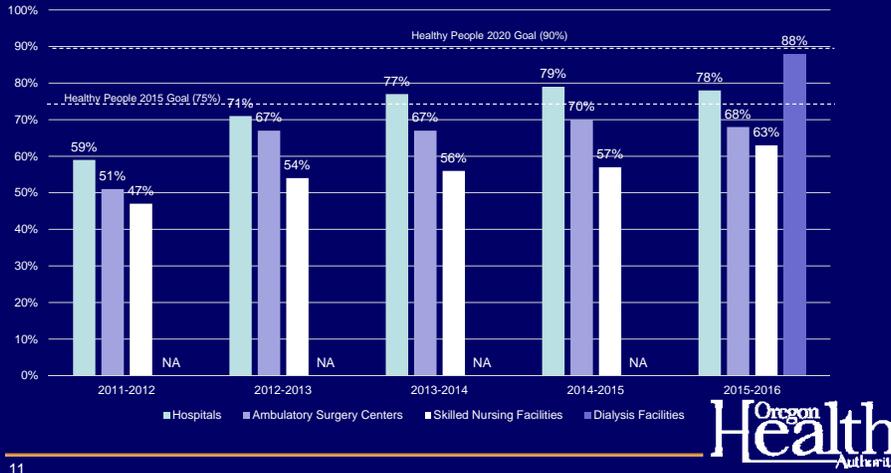
<https://public.health.oregon.gov/DiseasesConditions/CommunicableDisease/HAI/Pages/Reports-and-Data.aspx>



2013

# HCW Influenza Vaccination

Figure 1. Healthcare personnel influenza vaccination rates for 2011-2012, 2012-2013, 2013-2014, 2014-2015, and 2015-2016 influenza seasons stratified by healthcare facility



# Facility-specific HCW Flu Vax: 2014 Provider Report

Facility name	# HCW eligible for influenza vaccine <sup>a</sup>	Rate of influenza vaccination for eligible HCW <sup>b</sup>	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 <sup>c</sup>
Klamath Surgery Center	38	50%	11%	39%	-16%	X	X	15
Lane Surgery Center	32	73%	13%	13%	-14%	✓	X	5
Laser & Surgical Eye Center, LLC	42	45%	52%	2%	+11%	X	X	19
Lovjoy 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%	✓	✓	0
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%	✓	X	3
Northbank Surgical Center	153	55%	10%	35%	+14%	X	X	54
Northwest Ambulatory Surgery Center	95	74%	8%	20%	-16%	X	X	16
Northwest Center for Plastic Surgery, LLC	21	76%	10%	14%	-20%	✓	X	3
Northwest Gastroenterology Clinic	44	86%	0%	14%	-6%	✓	X	2
Northwest Spine and Laser Surgery Center	37	84%	16%	0%	+285%	✓	X	2
Ontario Surgery Center	21	67%	14%	18%	+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%	✓	✓	0
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%	+8%	✓	X	2
Pacific Cataract & Laser Institute	10	90%	10%	0%	+96%	✓	✓	0
Pacific Cataract and Laser Institute	12	75%	25%	0%	-18%	✓	X	2
Pacific Digestive Endoscopy Center	8	38%	63%	0%	-20%	X	X	4
Pacific Surgery Center	24	75%	25%	0%	0%	✓	X	4
Pearl Surgicenter	30	80%	20%	0%	+83%	✓	X	3
Petroff Center	17	41%	41%	18%	-31%	X	X	8

# Facility-specific HCW Flu Vax: 2014 Consumer Report

## What can patients and families do to not get influenza?

- Ask for influenza vaccination from your health care provider for you and your family every October.
- Clean your hands often, especially after blowing your nose or coughing.
- Cover your face when you sneeze and cough, then clean your hands.
- Avoid going to work or school when sick.
- Ask your health care provider if they got the influenza vaccination this year.

**Table 14. Health care worker (HCW) influenza vaccination rates for the 2014–2015 influenza season: hospitals (n=62)**

Facility name	# HCW eligible for influenza vaccine*	Rate of influenza vaccination for eligible HCW†	Met HP2015 target (75%)
Adventist Medical Center	2,480	84%	✓
Asante Rogue Regional Medical Center	3,801	69%	✗
Asante Three Rivers Medical Center	1,343	78%	✓
Ashland Community Hospital	516	58%	✗
Bay Area Hospital	1,219	78%	✓
Blue Mountain Hospital	224	53%	✗
Cedar Hills Hospital	349	58%	✗

# Vaccine Promotion Strategies

## Oregon 2016 HAI Hospital Survey

### Healthcare Personnel Influenza Vaccination Promotion Strategies

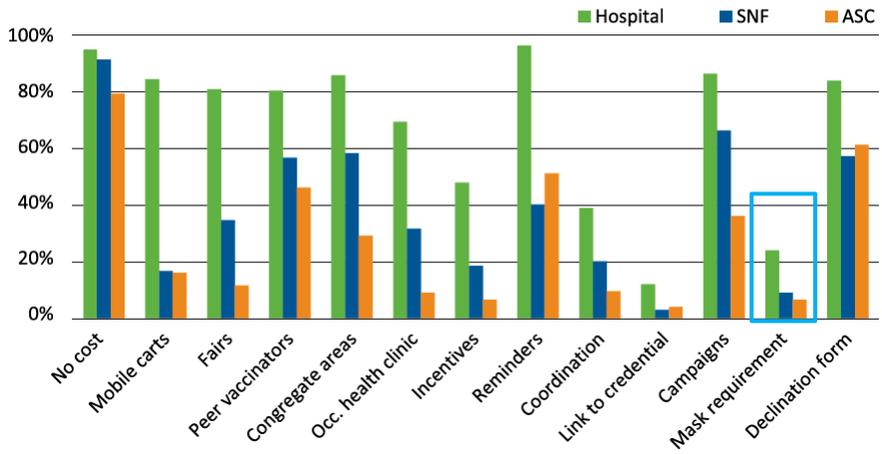
\* 59. Which of the following strategies did you use to deliver and promote healthcare personnel influenza vaccination at your facility? Check all that apply.

- Mobile carts
- Centralized mass vaccination fairs
- Peer vaccinators
- Provided vaccination in congregate areas (e.g., conferences/meetings or cafeteria)
- Provided vaccination at occupational health clinic
- Incentives
- Reminders by mail, email, pager, or text
- Coordination of vaccination with other annual programs (e.g., tuberculin skin testing)
- Campaign including posters, flyers, buttons, fact sheets
- Required mask use during influenza season among personnel declining influenza vaccination
- Required declination form
- Other (please specify)



# Vaccine Promotion Strategies

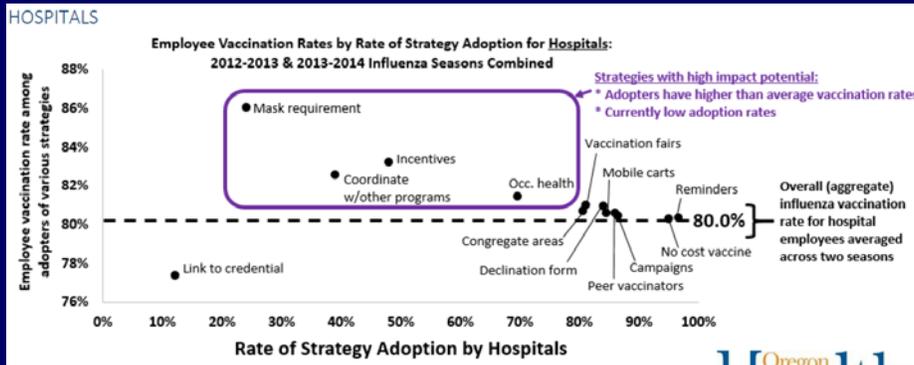
Figure 1. Use of vaccine promotion strategies by facility type: averaged over 2012–13 and 2013–14 influenza seasons



Samper, ID Week 2015



# Identifying Strategies with High Impact Potential

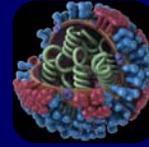


<https://public.health.oregon.gov/DiseasesConditions/CommunicableDisease/HAI/Documents/Reports/SummaryFluVax-Strategies2016.pdf>



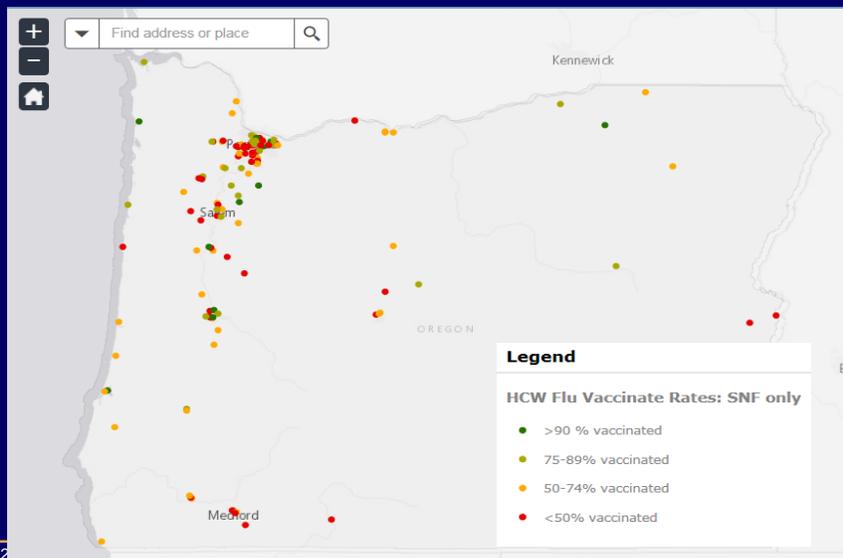
## Next Steps

- Improve interactive map
- Examine rates by county/region
- Support promotion efforts
  - Collaborate with Immunization & Preparedness
  - Develop Toolkit
  - Engage counties and HPP regions



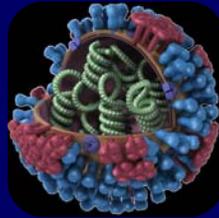
17

## Updated Interactive Map for Oregon: Benchmarking Healthy People Goals



## Oregon Update: 2015-2016 HCW Flu Vax

- Oregon HCW Influenza Vaccination Rates
  - Hospitals: **78%**
  - ASCs: **68%**
  - SNFs: **63%**
  - Dialysis: **88%**
- Healthy People Goals:
  - 2015 goal: 75%
  - 2020 goal: 90%



19

## Oregon: 2015-2016 HCW Flu Vax

Facility Type	# HCW	#HCW no-med exempt	Vax Rate (%)	Unknown Status (%)	Declined (%)
Hospital	100,155	99,157	78%	13%	9%
SNF	15,198	15,709	63%	18%	19%
ASC	5,403	5,333	68%	8%	22%
Dialysis	3,031	3,001	88%	5%	7%



20

# Questions? Follow Up?

Monika E. Samper  
monika.e.samper@state.or.us

Oregon  
Health  
Authority