

Clatsop  
County  
Health and  
Human  
Services

2012

Provided by:  
Oregon Public Health Division, Immunization Program

Annual Assessment of  
Immunization Rates  
and Practices



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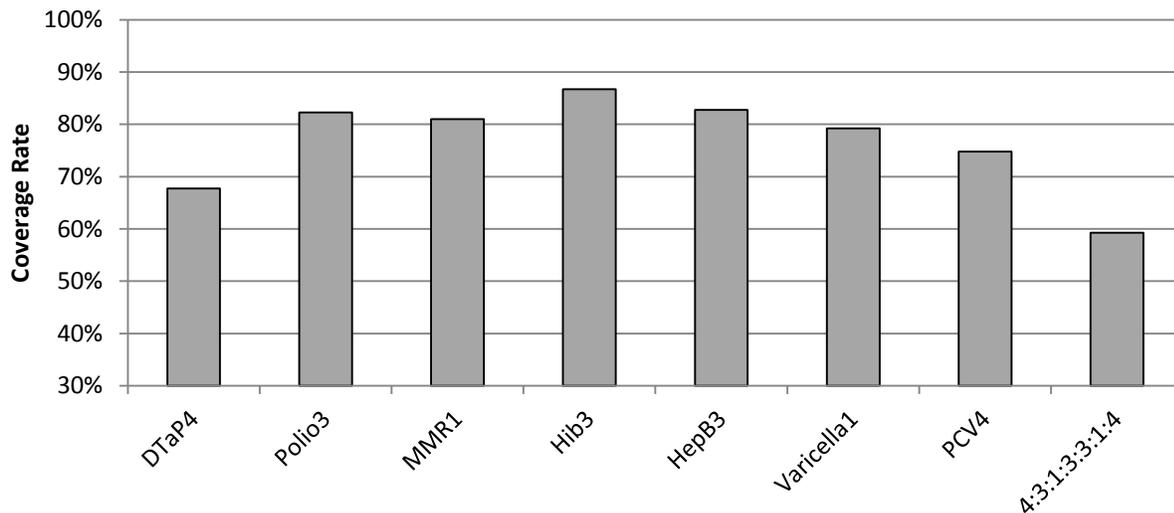
## CLATSOP COUNTY HEALTH DEPARTMENT IMMUNIZATION PRACTICES, 2012 EXECUTIVE SUMMARY

Oregon AFIX is a quality improvement program designed to improve clinic-level immunization rates and practices through routine assessment and feedback.

This report provides data about pediatric patients who receive immunization services at your health department. This clinic-based assessment can be used with other rates available through the Oregon Immunization Program (OIP) to assess the immunization status of your community and plan interventions to improve coverage rates.

**In 2012, 226 two year olds received immunizations at Clatsop County Health Department. Of these two year olds, 134 (59%) were fully immunized with the 4:3:1:3:3:1:4 series by 24 months of age (see Figure 1 below).**

**Figure 1.** Coverage Rates by 24 Months of Age, Individual Antigens, 4:3:1:3:3:1:4 Series, 2012



### **Implement the following strategies to improve immunization rates and services:**

1. Manage your patient population in the ALERT Immunization Information System (ALERT IIS). This ensures your assessment accurately reflects vaccination coverage for clients served at your health department.
2. Conduct reminder/recall activities routinely to identify and contact clients who are missing immunizations.
3. Periodically evaluate the effectiveness of reminder/recall and any other interventions employed by your health department



## QUESTIONS AND ANSWERS

### **What sources of data are used to produce this assessment?**

Oregon AFIX assessments rely on immunization data reported to ALERT IIS.

### **Which patients are included in the assessment for my clinic?**

Your assessment includes patients who were between 24-35 months of age as of Dec. 31, 2012, and whose status was listed as active at one or more of your health department's clinics in ALERT IIS. The report for each local health department includes their satellite clinics and, in some cases, delegates, depending upon local relationships. A list of clinics included is on page 5 of this report.

Patients become active with your clinic when you report immunizations or modify their record in other ways. Patients who are no longer seen at your clinic can be manually marked as inactive. Patients who are marked as inactive are not included in AFIX assessments or in other ALERT IIS reports, like reminder/recall.

### **What is the up-to-date (UTD) rate for local health department clinics?**

Your clinic's up-to-date rate is the percent of two year olds actively affiliated with your clinic in ALERT IIS who have received the Advisory Committee on Immunization Practices (ACIP) recommended immunizations by age two. The series assessed is the 4:3:1:3:3:1:4 series which includes 4 DTaP, 3 IPV, 1 MMR, 3 Hib, 3 Hep B, 1 Varicella, and 4 PCV.

### **How are coverage rates calculated?**

Using ALERT IIS data, a file is created that contains active patients and their complete immunization records, from all sources including immunization providers, insurance plans, Coordinated Care Organizations, and DMAP. This file is imported into a CDC-developed software application called CoCASA. Rates are generated in CoCASA. CoCASA uses algorithms to determine that minimum age and minimum spacing requirements between doses in a vaccine series have been met.

### **Why are previous years' data not included in this report?**

Updated methodology is in place for the 2012 assessments. In previous years patient lists for most local health departments were pulled from IRIS and these patient lists

were adjusted to remove some patients, such as patients who only received a dose of flu at the health department. A parallel process was used for health departments that did not use IRIS.

This is the first year that all data are from ALERT IIS, and inclusion criteria have been simplified so that all active patients are included. Also, to align these local health department assessments with national standards, up-to-date is calculated at 24 months of age rather than at the date of assessment, and 4 doses of PCV have been added to the series that is assessed.

Due to these changes in methodology, this year's assessment cannot be compared to previous years. This assessment for 2012 should be considered a baseline assessment, and assessments for subsequent years will demonstrate the impact of interventions to improve immunization rates.

**Are adolescent rates available?**

Adolescent rates will be available for local health departments within the coming months.

**Other questions?**

Please contact Sara Beaudrault, VFC/AFIX Program Coordinator, at (971) 673-0300 or [sara.beaudrault@state.or.us](mailto:sara.beaudrault@state.or.us)

## CLATSOP COUNTY HEALTH DEPARTMENT IMMUNIZATION PRACTICES, 2012 ASSESSMENT RESULTS

The section of this report shows the immunization status of two year olds who receive immunization services at your health department. Unless otherwise noted, immunization rates displayed are for Clatsop County Health Department, and are assessed at 24 months of age.

Clinics included in this assessment:

Clatsop County Health Department

### Summary of Rates by Clinic, Region, and LHD Average

*Assessment Date*<sup>1</sup>: December 31, 2012

*Total number of records assessed, 24-35 month olds*<sup>2</sup>: 226

*Percent Population Served for 2012*<sup>3</sup>: 55%

**Table 1.** Immunization Status, Two Year Olds, 2012, N = 226

Up-to-Date	n	%
By 24 mos of age <sup>4</sup>	134	59%
Not by 24 mos <sup>5</sup>	10	4%
As of 12/31/2012 <sup>6</sup>	144	64%

Of the 82 patients who were not up-to-date as of Dec 31, 2012, 40 (49%) could have been brought up to date with only one immunization visit.

<sup>1</sup> All data are current as of Dec 31, 2012. Immunizations administered after this date are not included in this assessment.

<sup>2</sup> Records were assessed for all 24-35 month olds with an active status with the health department in ALERT IIS.

<sup>3</sup> Percent population served is the ratio of records assessed to births in the county.

<sup>4</sup> Patients immunized with 4 DTaP, 3 Polio, 1 MMR, 3 Hib, 3 HepB, 1 Varicella, and 4 PCV (4:3:1:3:3:1:4 series) by 24 months of age. This is the official local health department rate.

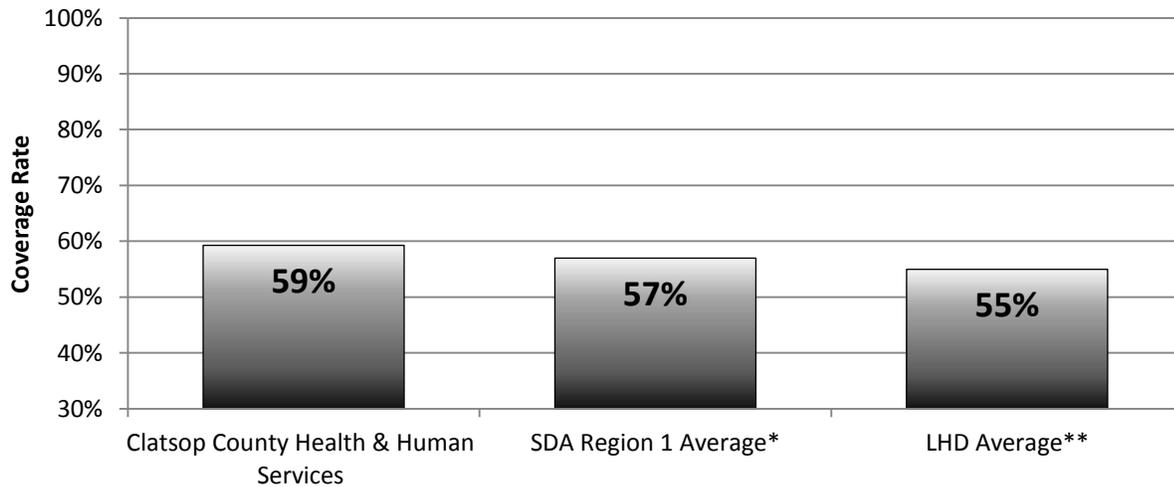
<sup>5</sup> Patients immunized with the 4:3:1:3:3:1:4 series after 24 months of age but by 12/31/2012.

<sup>6</sup> Patients immunized with the 4:3:1:3:3:1:4 series by 12/31/2012.

## Clatsop County Health Department Immunization Practices, 2012

Figure 2 shows the 4:3:1:3:3:1:4 series rate for two year olds, in 2012, immunized by your health department clinic(s), at local health departments within your service district area (SDA), and at local health departments throughout Oregon.

**Figure 2.** 4:3:1:3:3:1:4 Series Rate, Two Year Olds, LHD, SDA, and LHD Average, 2012



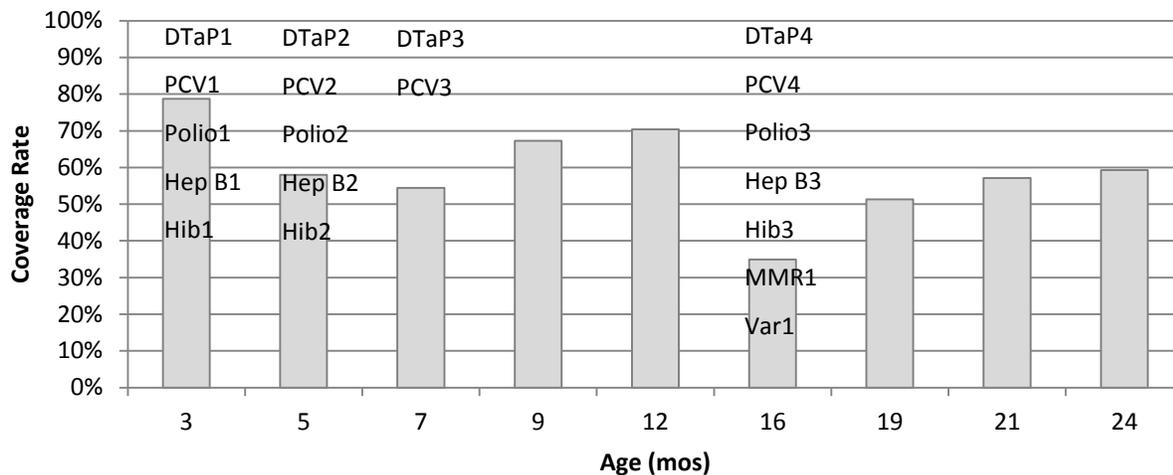
\* Average includes all two year olds served at local health department clinics within SDA 1. SDA Region 1 includes Clatsop, Columbia, and Tillamook counties.

\*\* Average includes all two year olds served at local health department clinics throughout Oregon.

## Clatsop County Health Department Immunization Practices, 2012 Age-Appropriate Coverage Rates

Figure 3 shows the percent of two year olds in 2012, who received ACIP-recommended, age-appropriate immunizations in the 4:3:1:3:3:1:4 series, assessed at 3, 5, 7, 9, 12, 16, 19, 21, and 24 months of age.

**Figure 3.** Age Appropriate Coverage Rates, Children 3-24 Months of Age, 2012



Note: Each point shown on the graph in Figure 3 is a “snapshot” of coverage at that age. For example, at three months of age, the rate shown is the percent of children immunized with 1 DTaP, 1 Polio, 1 Hib, 1 HepB, and 1 PCV. The vaccine/dose names seen in the graph describe the point at which the assessment includes them in the criteria for calculating the coverage rate.

### Strategies to maintain high coverage rates across the first two years:

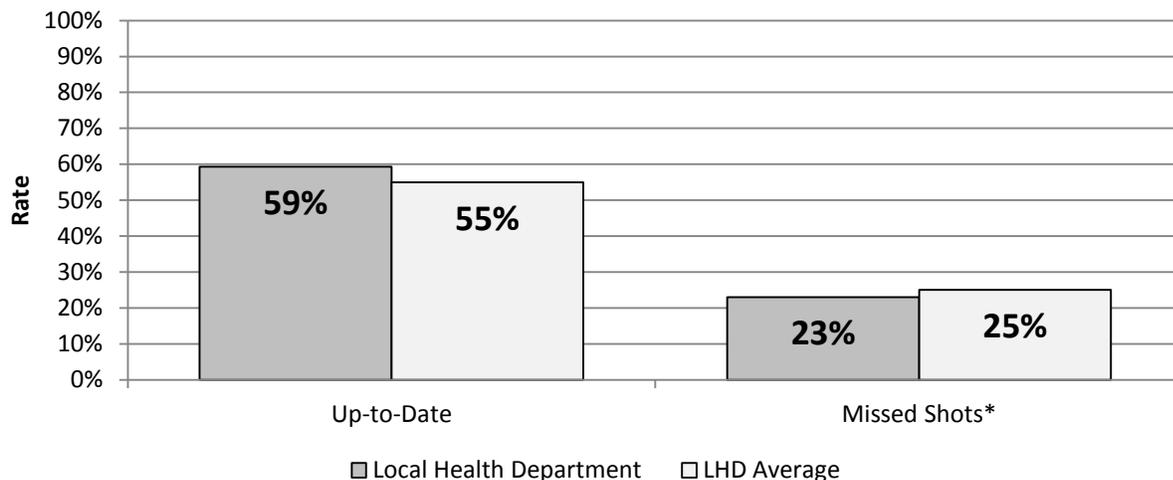
Identify the ages when immunization rates are lower for your health department. For most clinics, immunization rates are higher during the first year than during the second year. Develop interventions to affect these specific points in time. These may include:

1. Give vaccines early in the ACIP-recommended window. This gives more opportunities to catch kids for these immunizations prior to 24 months
2. Use a reminder/recall system during the second year to make sure kids receive the vaccines that are due.
3. Reschedule appointments that are missed or cancelled.

## Clatsop County Health Department Immunization Practices, 2012 Missed Shots and Late Starts

Figure 4 shows the relationship between the up-to-date rate and missed shots\* for your local health department and at local health departments throughout Oregon.

**Figure 4.** Up-To-Date Rate, % Missed Shots, Local Health Department and LHD Average, 2012



\* A missed shot is when a child was given at least one immunization for which they were due, but was not given all the immunizations they could have received. The missed shot rate is the percent of children who did not receive all the immunizations they could have received at any visit.

Missed shots can occur for a number of reasons, including that clinic staff do not use a forecaster to help determine which vaccines to give, or parents request to limit the number of doses administered at any given visit. It is possible for a child to be included in the missed shots count and still be up to date at 24 months.

### Strategies to Reduce Missed Shots:

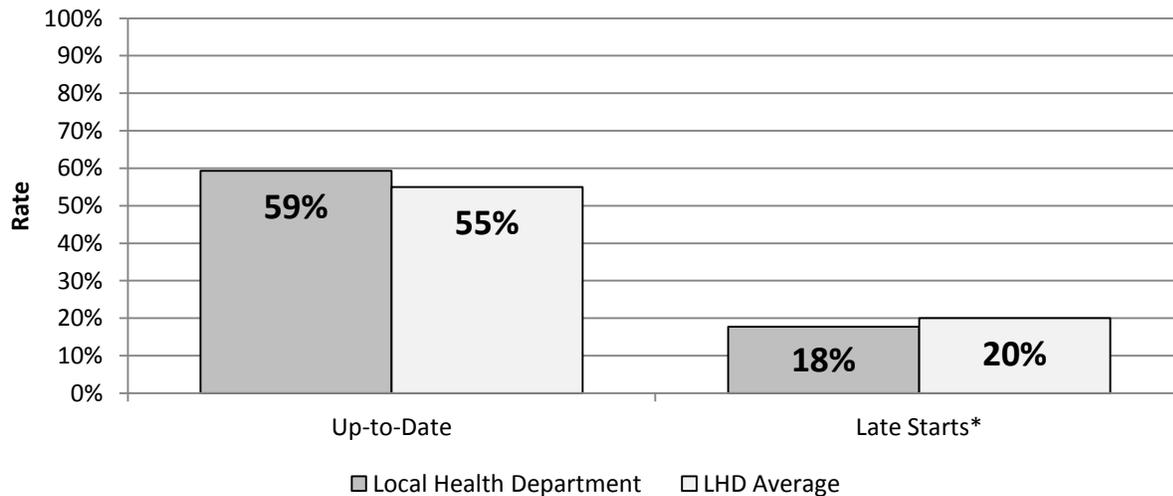
Identify the primary causes of missed shots at your clinic, and plan appropriate interventions to reduce missed shots.

1. Use the ALERT IIS forecaster each time a client is seen to identify due or past due immunizations.
2. Develop methods to educate parents on the safety of the routine ACIP schedule, including the number of vaccines given at each visit.
3. For families that limit the number of vaccines at any given visit, schedule immunization-only visits, in addition to well-child visits.

## Clatsop County Health Department Immunization Practices, 2012

Figure 5 shows the relationship between the up-to-date rate and late starts\* for your local health department and at local health departments throughout Oregon.

**Figure 5.** Up-To-Date Rate, % Late Starts, Local Health Department and LHD Average, 2012



\*A patient is counted as a late start if they do not receive their first shots until after 3 months of age

Patients who begin getting vaccines on time are two to three times more likely to be up-to-date by 24 months than patients who begin receiving immunizations late.

In 2012 at Clatsop County Health Department, 67% of patients who began receiving vaccines on time were up-to-date by 24 months of age, compared to 23% of patients who did not receive their first vaccines until after 3 months of age.

### Strategies to bring Late Starts up-to-date by 24 months of age:

Identify ways to reduce the percentage of late start clients who are served at your health department, or to track these clients to bring them up-to-date as quickly as possible.

1. Partner with your local hospital or with clinics that provide prenatal care to educate families about the routine immunization schedule.
2. Use a reminder/recall system for late start clients that follows minimum spacing guidelines, as published by ACIP.

## Clatsop County Health Department Immunization Practices, 2012 Individual Vaccine Rates

Figure 6 shows the percent of two year olds fully covered with the individual vaccines in the 4:3:1:3:3:1:4 series and 2 doses of Hepatitis A, compared to the national Healthy People 2020 goal of 90%.

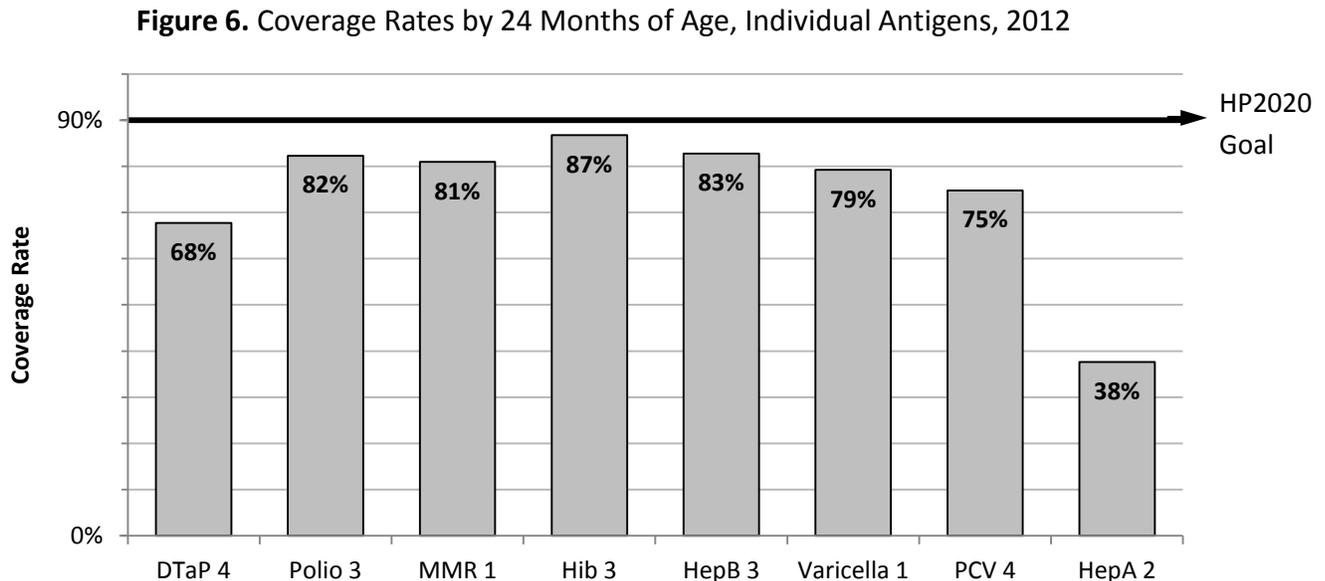


Figure 6 identifies specific vaccines with the lowest coverage rates. Focusing interventions on individual vaccines with low coverage rates will likely increase the overall UTD rate over time.

Strategies to focus on improving individual vaccine rates to improve the overall series rate at 24 months of age:

Identify which vaccines have lower coverage rates for clients served at your health department, and implement one or more of the following strategies:

1. Conduct a vaccine-specific reminder/recall. When clients come in, give all vaccines that are due.
2. Give vaccines early within the ACIP-recommended window to maximize the number of opportunities you have to immunize the client.
3. Ensure that your staff who provide immunizations have the resources they need to communicate effectively with parents about the importance and safety of these vaccine(s).

**The Oregon Immunization Program recommends that all health departments implement the following three evidence-based strategies to improve coverage rates.** Many health departments may want to develop additional interventions to address specific issues within their county.

OIP can provide training and technical assistance on implementing strategies to improve immunization rates.

### **1. Routinely manage your patient population in ALERT IIS.**

Benefits:

- Immunization rate assessments will include only patients who actively receive services at your clinic
- ALERT IIS reports, like the reminder/recall and ad hoc list reports, are more useful, including only information about active patients

How to manage your patient population in ALERT IIS:

- Run an ad hoc list report to get a list of clients whose status is active with your clinic
- Use the criteria defined by OIP to determine which clients should be inactivated
- Manually inactivate patients in ALERT IIS

Complete instructions are available at:

<http://1.usa.gov/ImmunizationProviderResources>

### **2. Regularly conduct reminder/recall activities to identify and contact clients who are missing immunizations.**

OIP sends monthly recalls to the family of children at age 20 months who are missing immunizations (Beginning in late 2013). Local health departments should conduct additional reminder/recall activities to address specific under-immunization for their clients.

The reminder/recall report option in ALERT IIS allows users to select the ages, antigens, and other variables to include in reminder/recall reports. Users can also generate customized letters to clients.

### **3. Periodically measure the effectiveness of interventions.**

Routinely measuring outcomes of interventions demonstrates whether an intervention is effective, is a good use of resources, and provides data for accountability. These data should be shared with staff who have a role in immunizations.

Some options that may be appropriate for your health department include:

- Measure coverage rates using the ALERT IIS Assessment or Benchmark report on a quarterly basis.
- Track the number of reminder/recall notices sent and the number of these clients who come in for immunizations.
- Track the number of missed visits and the results of contacting these patients.

**The Guide to Community Preventive Services is a great resource for proven strategies to improve immunization rates within your health department and broader community.** This guide is available at <http://www.thecommunityguide.org/vaccines/index.html>. Consider these strategies when developing an intervention to improve immunization rates in your community.

Contact OIP for assistance with implementing these three, or other, strategies to improve immunization coverage rates.

Additional immunization data are available through the Oregon Immunization Program

**This assessment of immunization rates of clients served at your health department can be used in conjunction with other data available to assess the immunization status of your community, and to plan interventions to improve immunization rates.**

OIP produces the following rates annually:

- Population-based rates for two year olds:
  - Statewide by series, individual antigens, Medicaid, WIC, VFC, race, and ethnicity
  - County of residence by series, individual antigens, Medicaid, and WIC
  - Census tract (series rates only)

While the AFIX rates that are the focus of this report only include clients who receive services at your health department clinic, population-based rates measure the immunization rates of all two year olds residing in the state or county. AFIX rates measure your *clinical* population, while population-based rates measure your *geographic* population.

- Adolescent immunization rates (beginning in 2013)
- School exemption rates by state, county, district, and high school catchment area

Influenza and pneumococcal rates for persons 65+ years of age, are also available through BRFSS data.

OIP can generate other data, such as data on shot-limiting behavior among families served at your health department, upon request. Got an unanswered question or a data need not fulfilled by the above options? Just ask your health educator!

Looking at immunization data can give you a better picture of areas of need within your county and guide you toward interventions that are tailored to your health department. We are happy to help you interpret the available data, plan interventions, and evaluate the effectiveness of interventions.

## Appendix 1: 2012 Local Health Department Percent Population Served and Immunization Rates

County	# served <sup>1</sup>	Percent Population Served		Up-to-Date at 24 Months <sup>4</sup>	
		# births <sup>2</sup>	% Pop Served <sup>3</sup>	# UTD	% UTD
Baker County Health Department	165	165	100%	122	74%
Benton County Health Department	96	727	13%	34	35%
Clackamas County Health Division	349	3869	9%	180	52%
Clatsop County Health & Human Services	226	413	55%	134	59%
The Public Health Foundation of Columbia County	26	491	5%	11	42%
Coos County Health Department	54	656	8%	29	54%
Crook County Health Department	101	181	56%	49	49%
Curry County Health Department	76	180	42%	31	41%
Deschutes County Health Department	147	1709	9%	62	42%
Douglas County Health & Social Services	251	1049	24%	117	47%
Grant County Health Office	40	59	68%	20	50%
Harney County Health Department	40	88	45%	19	48%
Hood River County Health Department	141	278	51%	85	60%
Jackson County Health & Human Services	144	2341	6%	99	69%
Jefferson County Health Department	59	280	21%	36	61%
Josephine County Public Health Division	83	793	10%	44	53%
Klamath County Department of Public Health	50	803	6%	26	52%
Lake County Public Health	86	70	123%	50	58%
Lane County Public Health Services	311	3495	9%	152	49%
Lincoln County Public Health	115	443	26%	59	51%
Linn County Department of Health Services	65	1456	4%	24	37%
Malheur County Health Department	50	477	10%	25	50%
Marion County Health Department	714	4604	16%	393	55%
Morrow County Health Department	90	163	55%	54	60%
Multnomah County Health Department	1705	9610	18%	1033	61%
North Central Public Health District	369	335	110%	193	52%
Polk County Health Department	117	911	13%	65	56%
Tillamook County Health Department	125	245	51%	69	55%
Umatilla County Public Health Department	150	1107	14%	77	51%
Union County Center for Human Development	63	281	22%	35	56%
Wallowa County Health Department	27	61	44%	14	52%
Washington County Health & Human Services	241	7113	3%	119	49%
Wheeler County Health Department	19	15	127%	9	47%
Yamhill County Public Health	93	1127	8%	50	54%
<b>TOTALS AND AVERAGES</b>	<b>6388</b>	<b>45595</b>	<b>14%</b>	<b>3519</b>	<b>55%</b>

<sup>1</sup> Number of records assessed for 24-35 month olds (born between 1/1/10 - 12/31/10). The same client may appear in multiple health department reports.

<sup>2</sup> Number of births in the county during 2010. Source: The Oregon Center for Health Statistics

<sup>3</sup> Number served divided by the number of births in the county.

<sup>4</sup> The UTD rate is for the 4:3:1:3:3:1:4 series which includes 4 DTaP, 3 IPV, 1 MMR, 3 Hib, 3 Hep B, 1 Varicella, and 4 PCV by age 24 months.

This report provided by  
Oregon State Public Health Division  
Immunization Program

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These data are available in other forms not included in this report.

To request custom reports or for answers to questions about this report,  
please contact your Health Educator or Sara Beaudrault for more information.

(971) 673-0300