



Local Efforts to Improve Childhood Vaccine Access



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How familiar are you with efforts to improve childhood vaccine access in your community or region?

- A. Very familiar** – I'm actively involved in related work
- B. Somewhat familiar** – I've heard about these efforts but haven't been directly involved
- C. Not very familiar** – I know a little but would like to learn more
- D. Not familiar at all** – this is all new to me

Setting the Stage



What the Numbers Tell Us



Voices from the Field



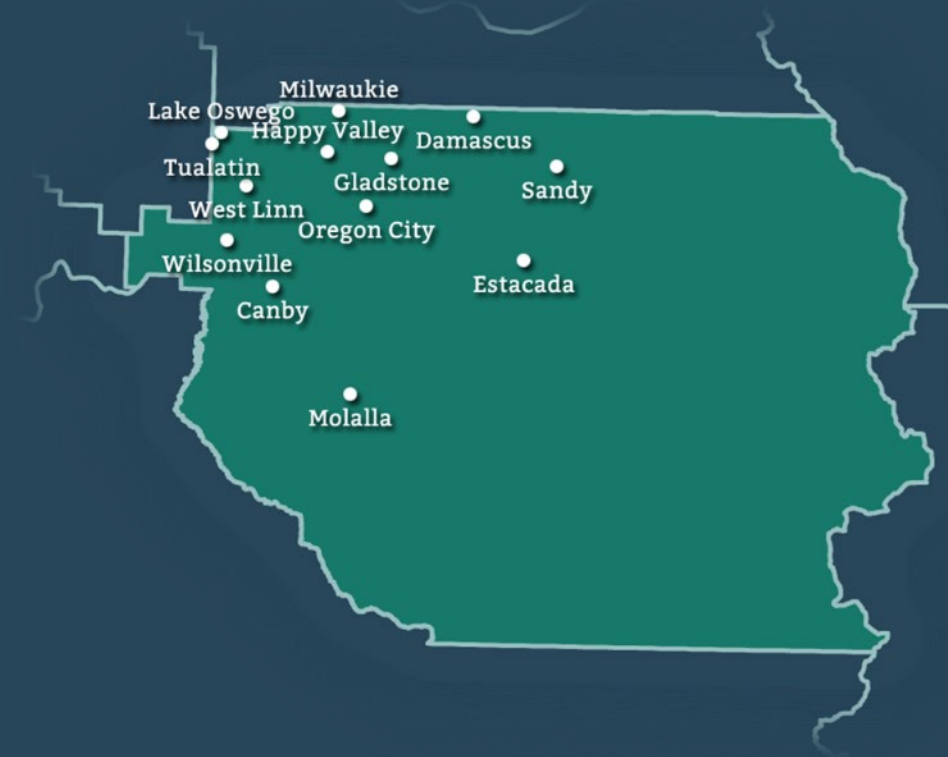
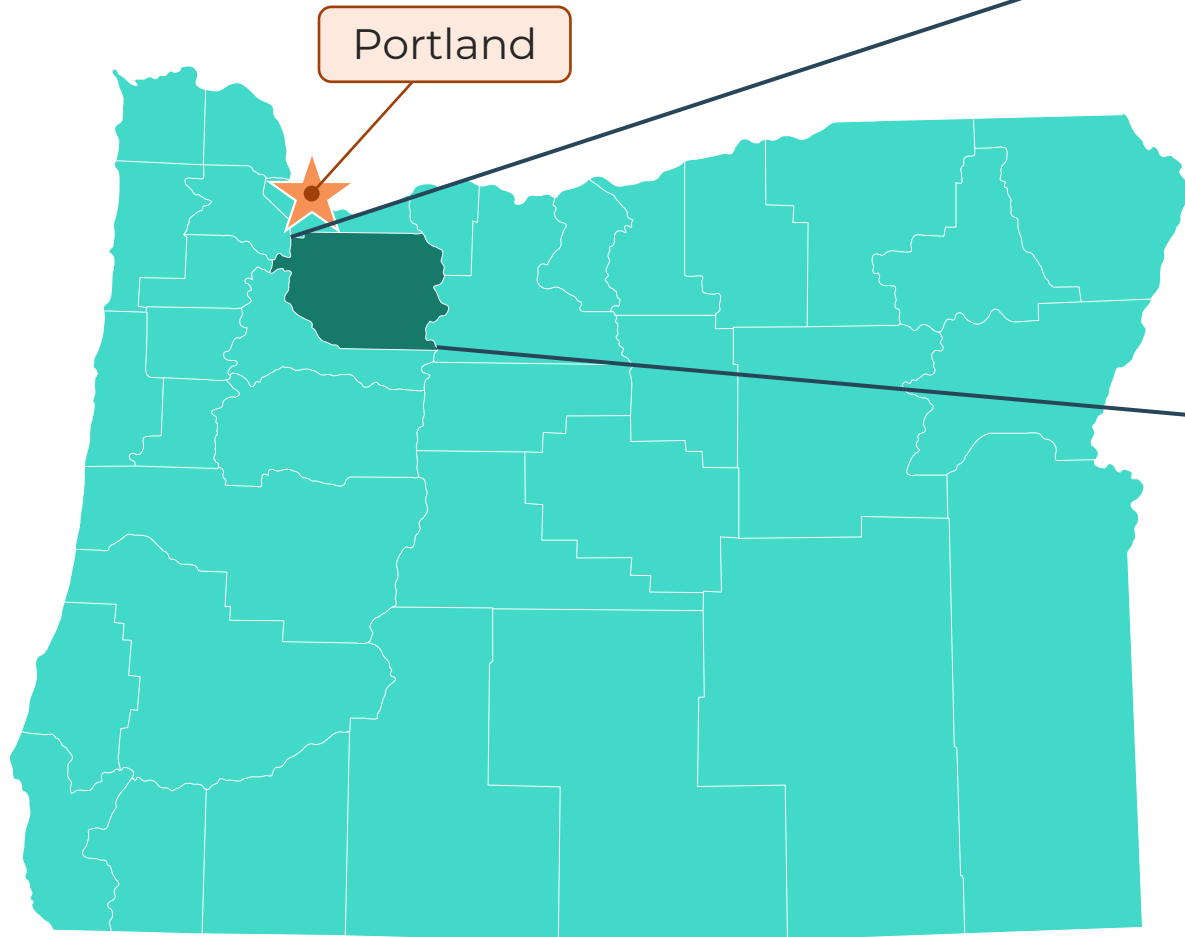
Turning Insights into Action





Setting the Stage

Clackamas County at a Glance



429,000 persons

- 77.5% white
- 10.3% Hispanic/Latino

Agriculture, timber, manufacturing

- #1 cultivator of Christmas trees

Have your tots had all their shots?

Your baby's good health is the best reason to immunize on time.

Ask your doctor or nurse if your baby's shots are up to date at every visit. And keep a record for yourself.

Immunizations protect your child from:

- polio
- diphtheria
- tetanus
- pertussis
- hepatitis B
- Haemophilus influenzae b
- rubella
- measles
- mumps



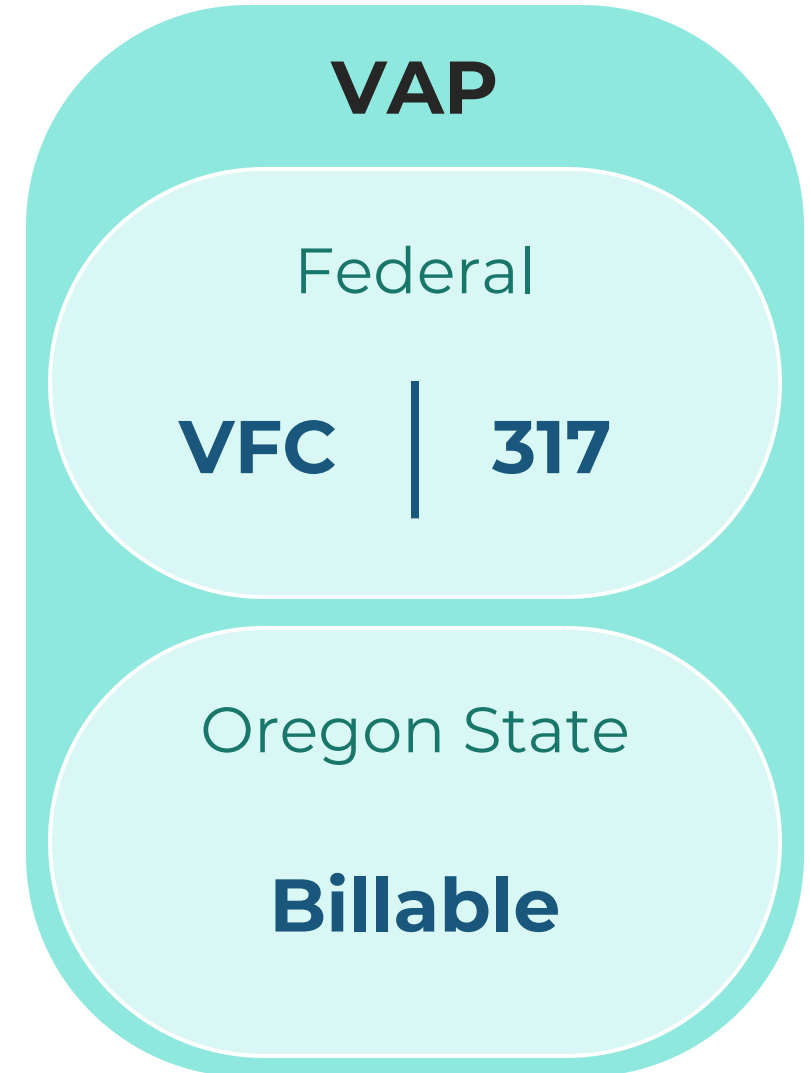
Vaccines for Children (VFC)

- Federal entitlement program providing no-cost immunizations to eligible children and young adults through age 18:
 - Medicaid-eligible
 - American Indian or Alaska Native
 - Uninsured
 - Underinsured (only at Federally Qualified Health Centers and Rural Health Clinics)
- Covers all recommended pediatric vaccines
- Clinics enroll in the VFC program and receive vaccine to administer to eligible patients
 - Must agree to certain requirements for billing, storage, auditing, etc.

Oregon's Vaccine Access Program (VAP)



- The **Vaccine Access Program (VAP)** is a state-funded program designed to improve access for people of all ages.
- Most of the vaccine administered by VAP providers is **state-supplied**:
 - **Vaccines for Children (VFC)** – federally funded, for children who are eligible for Medicaid, AI/AN, or uninsured/underinsured
 - **317 program vaccines** – federally funded, for uninsured adults
 - **Oregon billable vaccine** – state-funded, for insured clients not eligible for VFC or 317:
 - adults on Medicaid or Medicare
 - children and adults who are privately insured



- Vaccine Access Program (VAP) clinics maintain **one state-provided stock for most vaccines**
- The VAP clinic pays the State for the cost of vaccines administered to Billable clients **after** the clinic receives reimbursement from insurance
- Major benefit: Clinics can stock a full vaccine supply and **reduce upfront vaccine purchasing costs**

~300 safety net clinics in Oregon participate in VAP

VFC and VAP Over the Years: Greater Protection, Greater Complexity



Immunization Schedule: **1995**



Immunization Schedule: **2025**

Vaccine	Birth	2 Months	4 Months	6 Months	12 Months	15 Months	18 Months	4-6 Years	11-12 Years	14-16 Years
Hepatitis B	HB-1									
		HB-2		HB-3						
Diphtheria-Tetanus-Pertussis (DTP)		DTP	DTP	DTP	DTP or DTaP ≥ at 15 months			DTP or DTaP	Td	
<i>Haemophilus influenzae</i> type b		Hib	Hib	Hib	Hib					
Poliovirus		OPV	OPV	OPV				OPV		
Measles-Mumps-Rubella					MMR			MMR	or MMR	

Table 1 Recommended Child and Adolescent Immunization Schedule for Ages 18 Years or Younger, United States, 2025

These recommendations must be read with the notes that follow. For those who fall behind or start late, provide catch-up vaccination at the earliest opportunity as indicated by the green bars. To determine minimum intervals between doses, see the catch-up schedule (Table 2).

Vaccine and other immunizing agents	Birth	1 mo	2 mos	4 mos	6 mos	9 mos	12 mos	15 mos	18 mos	19-23 mos	2-3 yrs	4-6 yrs	7-10 yrs	11-12 yrs	13-15 yrs	16 yrs	17-18 yrs			
Respiratory syncytial virus (RSV-mAb [Nirsevimab])	1 dose depending on maternal RSV vaccination status (See Notes)					1 dose (8 through 19 months). See Notes														
Hepatitis B (HepB)	1st dose	← 2nd dose →			← 3rd dose →															
Rotavirus (RV): RV1 (2-dose series), RV5 (3-dose series)			1st dose	2nd dose	See Notes															
Diphtheria, tetanus, acellular pertussis (DTaP <7 yrs)			1st dose	2nd dose	3rd dose		← 4th dose →			5th dose										
Haemophilus influenzae type b (Hib)			1st dose	2nd dose	See Notes		← 3rd or 4th dose (See Notes)													
Pneumococcal conjugate (PCV15, PCV20)			1st dose	2nd dose	3rd dose		← 4th dose →													
Inactivated poliovirus (IPV)			1st dose	2nd dose	← 3rd dose →							4th dose					See Notes			
COVID-19 (1vCOV-mRNA, 1vCOV-aP5)					1 or more doses of 2024-2025 vaccine (See Notes)															
Influenza (IV3, ccIV3)					1 or 2 doses annually										1 dose annually					
Influenza (LAIV3)											1 or 2 doses annually		1 dose annually							
Measles, mumps, rubella (MMR)					See Notes	← 1st dose →					2nd dose									
Varicella (VAR)							← 1st dose →					2nd dose								
Hepatitis A (HepA)					See Notes	2-dose series (See Notes)														
Tetanus, diphtheria, acellular pertussis (Tdap ≥7 yrs)														1 dose						
Human papillomavirus (HPV)														See Notes						
Meningococcal (MenACWY-CRM ≥2 mos, MenACWY-TT ≥2years)			See Notes														1st dose		2nd dose	
Meningococcal B (MenB-4C, MenB-FHbp)														See Notes						
Respiratory syncytial virus vaccine (RSV [Abrysvo])														Seasonal administration during pregnancy (See Notes)						
Dengue (DEN4CYD: 9-16 yrs)														Seropositive in endemic dengue areas (See Notes)						
Mpox																				

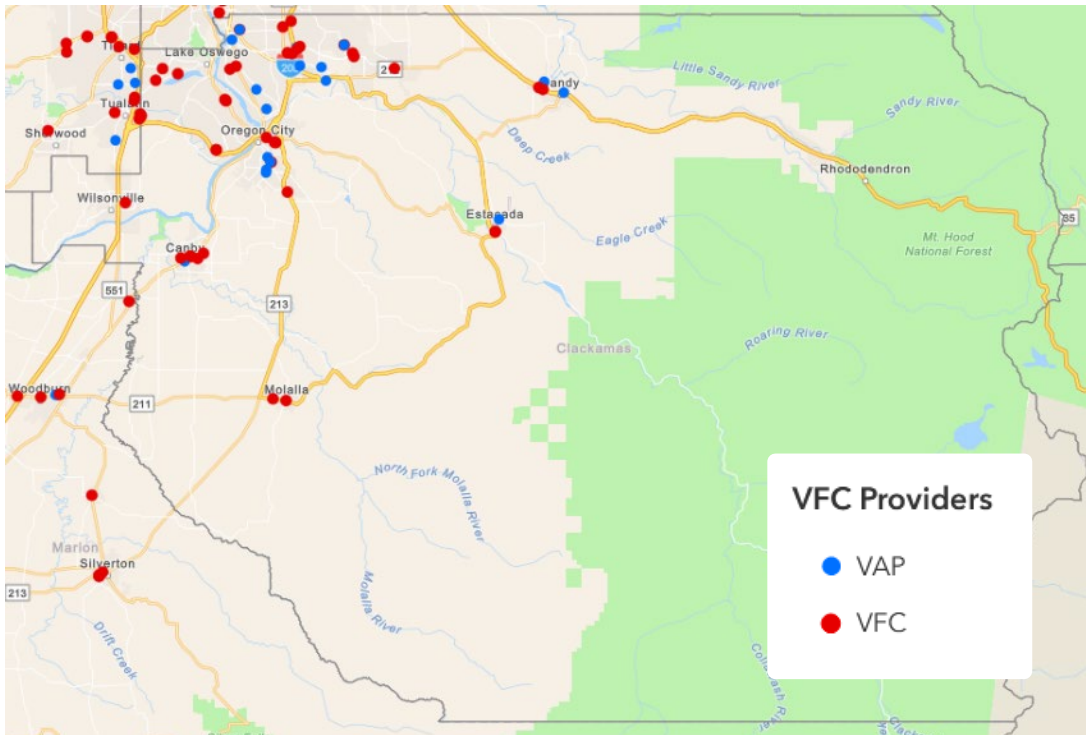
Increase in Vaccine Costs: 2005-2024

Timeframe	Total cost, 1 dose of each vaccine available	% increase since December 2005
Dec 2005	\$646.51	-
Dec 2010	\$2,065.55	219%
Dec 2015	\$2,727.35	322%
Dec 2022	\$3,939.47	509%
Dec 2024	\$5,768.09	792%

VFC and VAP Provider Distribution in Clackamas County



50 clinics currently participate in the Vaccines for Children (VFC) or Vaccine Access Program (VAP), with most concentrated in the more urban northwest part of the county:



CENSUS COUNTY DIVISION	NO. OF VFC/VAP CLINICS	2020 POPULATION	RESIDENTS PER CLINIC
Beavercreek	1	7,325	7,325
Canby	6	19,991	3,332
Colton	0	5,093	N/A
Estacada	2	17,523	8,762
Molalla	2	14,514	7,257
Mount Hood	0	10,671	N/A
Mulino	0	4,997	N/A
NW Clackamas	34	276,605	8,135
Redland	0	6,431	N/A
Sandy	4	23,637	5,909
Wilsonville	1	28,036	28,036
Yoder	0	6,578	N/A
County Total	50	421,401	8,428

- All 50 states and Washington D.C. require that children receive certain vaccines to attend child care and school.

—Medical exemptions

- Oregon families can claim a non-medical exemption from these requirements for religious or philosophical reasons

—Educational component required

- Vaccine requirements apply to all schools, public and private
- In Oregon, these requirements are enforced in February on “School Exclusion Day”, a deadline by which families must have submitted documentation for all required vaccines.



Oregon law requires the following shots for school and child care attendance*

A child 2-17 months entering
Child Care or Early Education needs*

Check with your child's program or healthcare provider for required vaccines

A child 18 months or older entering
Preschool, Child Care, or Head Start needs*

4 Diphtheria/Tetanus/Pertussis (DTaP)
3 Polio
1 Varicella (chickenpox)
1 Measles/Mumps/Rubella (MMR)
3 Hepatitis B
2 Hepatitis A
3 or 4 Hib

A student entering
Kindergarten or Grades 1-6 needs*

5 Diphtheria/Tetanus/Pertussis (DTaP)
4 Polio
1 Varicella (chickenpox)
2 MMR or 2 Measles, 1 Mumps, 1 Rubella
3 Hepatitis B
2 Hepatitis A

A student entering
Grades 7-12 needs*

5 Diphtheria/Tetanus/Pertussis (DTaP)
1 Tdap
4 Polio
1 Varicella (chickenpox)
2 MMR or 2 Measles, 1 Mumps, 1 Rubella
3 Hepatitis B
2 Hepatitis A

**At all ages and grades, the number of doses required varies by a child's age and how long ago they were vaccinated. Other vaccines may be recommended. Exemptions are also available. Please check with your child's school, child care or healthcare provider for details. 2/2024*

Additional Factors Affecting Vaccination Rates



- ✓ Vaccine hesitancy and misinformation
- ✓ Policy and funding challenges
- ✓ Staffing and workload changes
- ✓ Widening equity gaps

What the Numbers Tell Us



VFC Gap Analysis



Where are the gaps among childhood immunizations in Clackamas County?



What modifications should be considered to enhance access and health equity in the VFC program?



How can VFC services be integrated into Clackamas County Public Health's existing structure?

Vaccines for Children Community Assessment

Clackamas County Public Health Department
March 2024



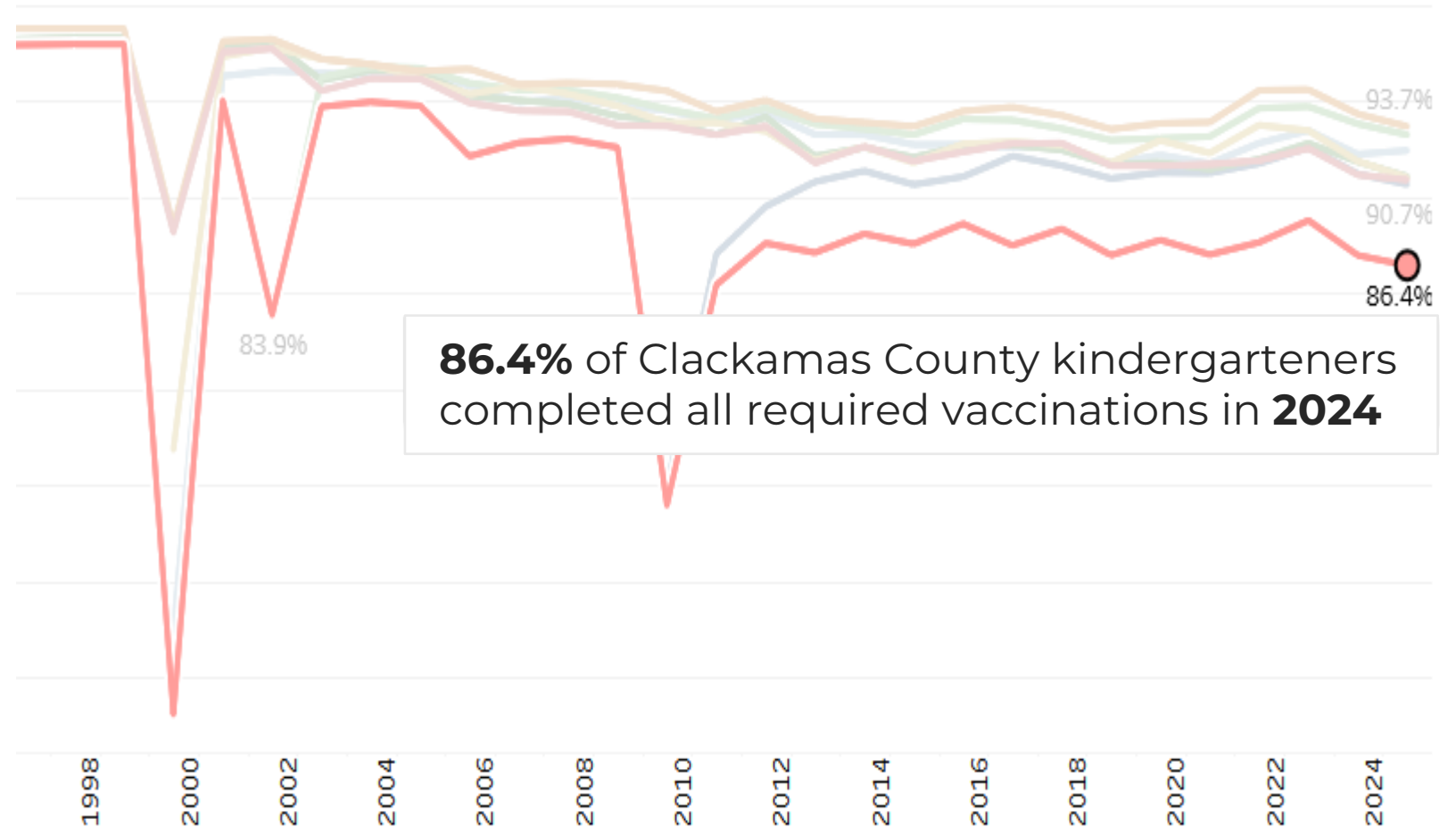
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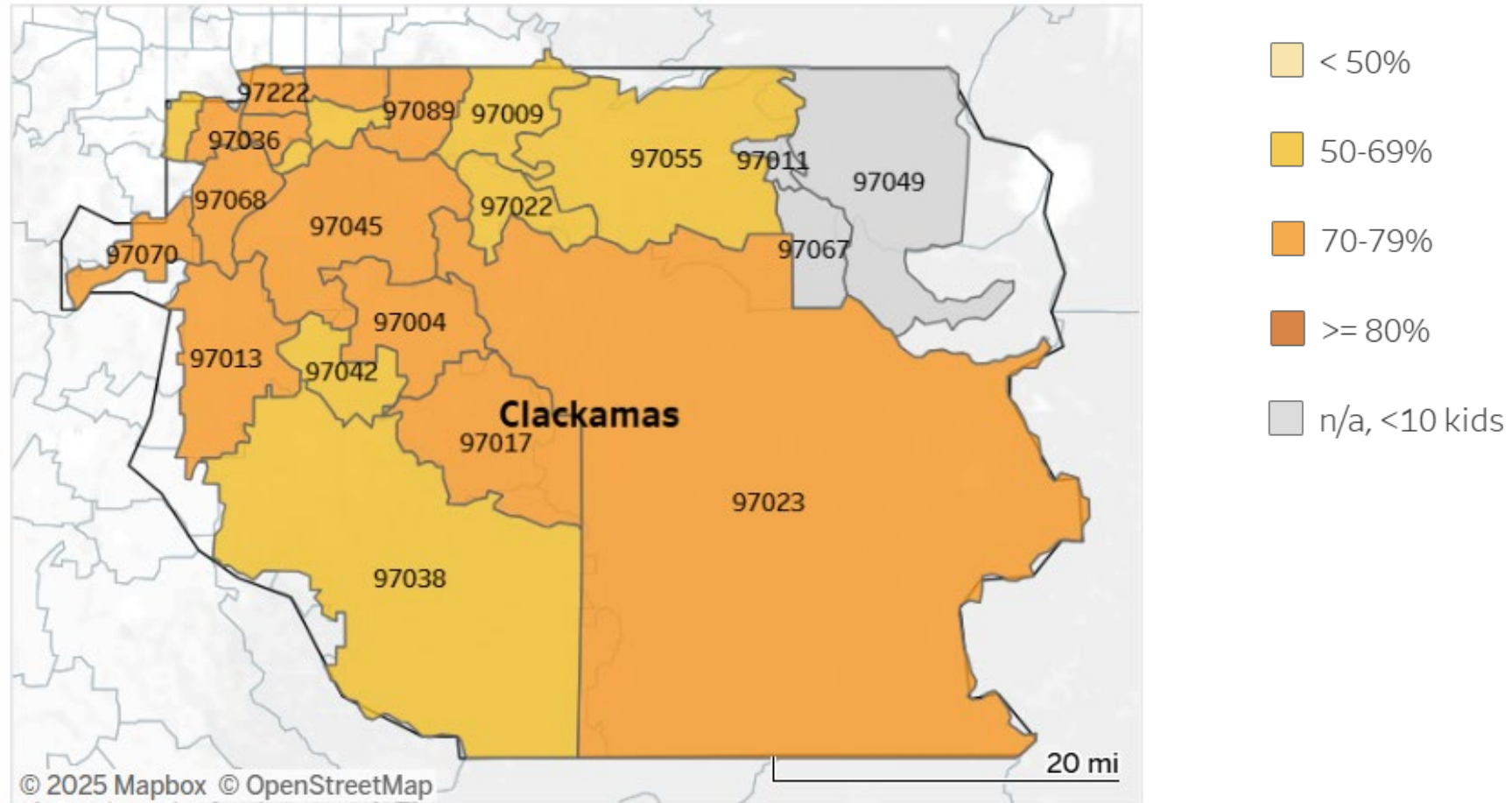
School Immunizations



- Clackamas County is seeing a continued decline in childhood immunization rates, reflecting a trend seen across Oregon
- Measles outbreak in Fall '24
 - 31 cases statewide, 9 in Clackamas



Geographic Gaps: Two-Year-Old Vaccination Rates by Zip Code (2024)

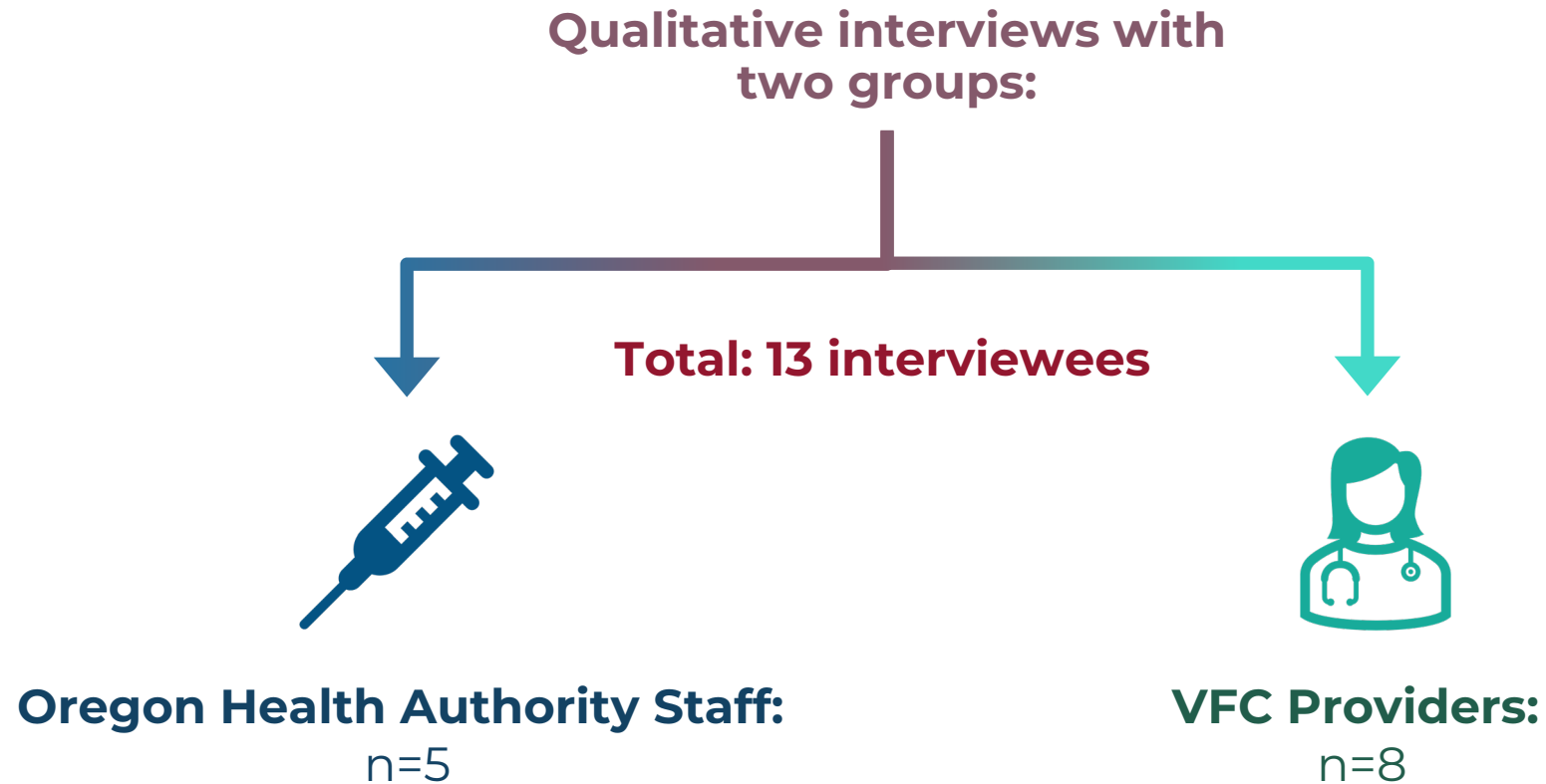


Community Gaps: Two-Year-Old Vaccination Rates by Race/Ethnicity



Voices from the Field





Vaccine Refusals

Delayed Schedules and Vaccine Hesitancy

Missed Well-Child Visits

Access to Services

"We track our reasons that kids are not up to date, especially at age 2, and we know the most common reason is a missed well child exam, and then the second is vaccine refusal and alternative schedule."
-VFC Provider

"I know it's hard, especially for folks out towards like Welches and Mount Hood to get in for vaccines."
-VFC Provider

Vaccine Hesitancy, Refusals, and Delayed Schedules



- Vaccine refusals and hesitancy have increased following the COVID-19 pandemic
- Many families choose to delay the recommended vaccine schedule or adopt a slower, more extended schedule

"I've seen probably close to a dozen patients in the last few months who [...] used to get vaccinated, and they told me, 'Since COVID I just don't trust any vaccines' and 'if I could do it again, I wouldn't vaccinate at all' or '[with] my new kid I'm not going to vaccinate at all.'"

- VFC Provider

"The Russian population, particularly, has very, very low vaccination rates. And we try really hard to convince them. They actually come in a lot for their visits, but they're not going to get vaccinated."

- VFC Provider

- Missed well-child appointments are a top reason for a child remaining unvaccinated
- Barriers to accessing appointments stemmed from limited hours of operation, limited transportation options, insufficient childcare, lack of internet access, and distance to care

*"[There is] good indication that some number of parents who claim a non-medical exemption in Oregon do it not because they don't want their kids vaccinated but because they don't have access."
- OHA Staff*

*"We used to [see a surge] a lot more than we do now. I think [now it's] like a handful of kids, so it's not like our 'shot only' schedule is full. [...] It used to be a huge panic and we would get hit hard [...] I feel like now, [there are fewer] because we're doing the recall efforts to make sure they're coming in for Well Care."
- VFC Provider*

Gaps: Barriers to Private Provider Participation in VFC



- Two-Stock Model
- Purchasing Costs
- Low Reimbursement

"With [the COVID] vaccine being commercialized and the new RSV monoclonal antibody that's on the market right now, we anticipate losing more VFC providers because the cost to them will be untenable."
- OHA Staff

"I have anecdotal reasons for why those providers don't want to accept kids on Medicaid, and it has to do with lower reimbursement rates."
- OHA Staff



Which barrier to childhood vaccination access do you hear about most in your work?

- A. Lack of nearby providers
- B. Insurance or cost
- C. Transportation challenges
- D. Misinformation or vaccine hesitancy
- E. Other (please type in chat)

Turning Insights into Action




CLACKAMAS
COUNTY
Public Health

Recommendations and Implementation



Collaborative Cross-Sector Partnerships

In Action

- Collaborate with Community-Based Organizations (CBOs) that serve communities with low vaccination rates.
- Partner with schools and school district health programs to increase school exclusion awareness.
- Work with existing healthcare providers and community organizations to enhance services.
- Community Liaisons working with specific populations.

In the Works

- Leverage Community Health workers
- Immunization coalitions, such as Immunize Oregon

Enable Equitable Access

In Action

- Embed Public Health nurse within County Health Centers for immunization-focused work.
- Improve access to all at the County Health Centers.
- Maintain ongoing collaboration with Community College student nurses.
- Choose childhood vaccine catch-up clinic locations and times based on low vaccination rates and vaccine access.

In the Works

- Equity work continues to expand as data, CBO participation, and barriers are reduced
 - Dependent on capacity, staffing, and funding

Actionable Data & Assessment: Assess and Monitor Population Health

In Action

- Community Assessments
 - Rapid Community Assessment
- Implementing patient surveys at catch-up clinics

In the Works

- Work to gather additional data to determine population characteristics and exclusion outcomes
- OHA's non-medical exemption parent survey

Effective Communication

In Action

- Provide targeted training for healthcare providers on effective vaccine communication.
- Promote vaccinations to schools and families to increase vaccination rates.
- Improve culturally informed communication efforts toward low-vaccination immigrant and BIPOC communities.

In the Works

- Develop a strategic communications plan for internal and external audiences.
- Establish long-term community connections and build trust beyond vaccine-related initiatives by engaging with community-based organizations.

Policy Development: Create, Champion, and Implement Policies, Plans, and Laws

In Action

- Incorporate vaccination promotion within other CCPHD programs such as WIC
- Integrating into Clackamas County's communicable disease team.

In the Works

- Support the State in efforts to extend the school exclusion period.
- Support vaccine finance modernization in Oregon.

What's Next?



- Legislation: Oregon Senate Bill 42
 - Funding to sustain and expand Vaccine Access Program
 - April 8: referred to Joint Committee on Ways & Means
- Beyond Clackamas County
 - These problems exist across Oregon and across the country
 - Lasting effects of the COVID-19 pandemic
 - The Oregon Health Authority is looking to modernize the patchwork of existing vaccine financing programs

- ✓ Improving childhood vaccine access is an equity concern and requires a multi-faceted approach
- ✓ Local public health efforts to improve vaccination rates are most effective in collaboration with community partners
- ✓ Low childhood vaccination uptake is multifactorial, and it can be difficult to untangle vaccine hesitancy from barriers to vaccine access
- ✓ While there are systems in place to support access to childhood vaccines, significant systemic barriers affect both families and providers
- ✓ In the current environment, immunization advocates must stay responsive to changing needs and evolving challenges.

A Chat With Bridget and Kevin



Betty
Bekemeier



Bridget
Abshear



Kevin
Staley

To ask a question, please click the Q&A icon in your Zoom toolbar!



Tell us what you think about today's webinar:



Special thanks to:

- Megan Rogers, Kelly Chadwick, Sue Grinnell, and Betty Bekemeier of the University of Washington's Northwest Center for Public Health Practice
- Kelly F. McDonald of the Oregon Immunization Program

Feel free to reach out with further questions.

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[https://www.clackamas.us/publichealth/
childhood-immunizations](https://www.clackamas.us/publichealth/childhood-immunizations)



Oregon School Immunization Rates

<https://public.tableau.com/app/profile/oregon.immunization.program/viz/SchoolLawTableau/Kimmunizations>

Oregon Early Childhood Immunization Rates

<https://public.tableau.com/app/profile/oregon.immunization.program/viz/OregonEarlyChildhoodImmunizationRates/StatewideDashboard>

Routine Immunizations on Schedule for Everyone (RISE) - CDC Toolkit and Resources

<https://www.cdc.gov/vaccines/php/rise/index.html>

Immunize Oregon – State Immunization Coalition

<https://www.immunizeoregon.org>