

How Nursing Students Can Enhance Preparedness Planning for Communicable Disease Response

Marilyn Gran-Moravec, MSN, RN, OHSU School of Nursing
Jennifer Little, MPH, Klamath County Public Health

HOW NURSING STUDENTS CAN ENHANCE PREPAREDNESS PLANNING FOR COMMUNICABLE DISEASE RESPONSE

RURAL HEALTH CONFERENCE

OCTOBER 2, 2025

Marilyn Gran-Moravec, MSN, RN
Assistant Professor of Clinical Nursing
Street Nursing Team Faculty Resident
OHSU School of Nursing

Jennifer Little, MPH
Director
Klamath County Public Health



SPECIAL THANKS TO YULISA AND BRIANNA



Photo: Yulisa Alonzo and Brianna Saude participating in the 2024 Great American Shake Out drill

OBJECTIVES FOR TODAY'S PRESENTATION

- Understand context in Klamath County
- Understand how to leverage partnerships with nursing students and their faculty to meet public health emergency preparedness plans
- Identify ways to expand collaborative work that aligns with the missions of academic institution and public health department



Photo: Moore Park

KLAMATH COUNTY



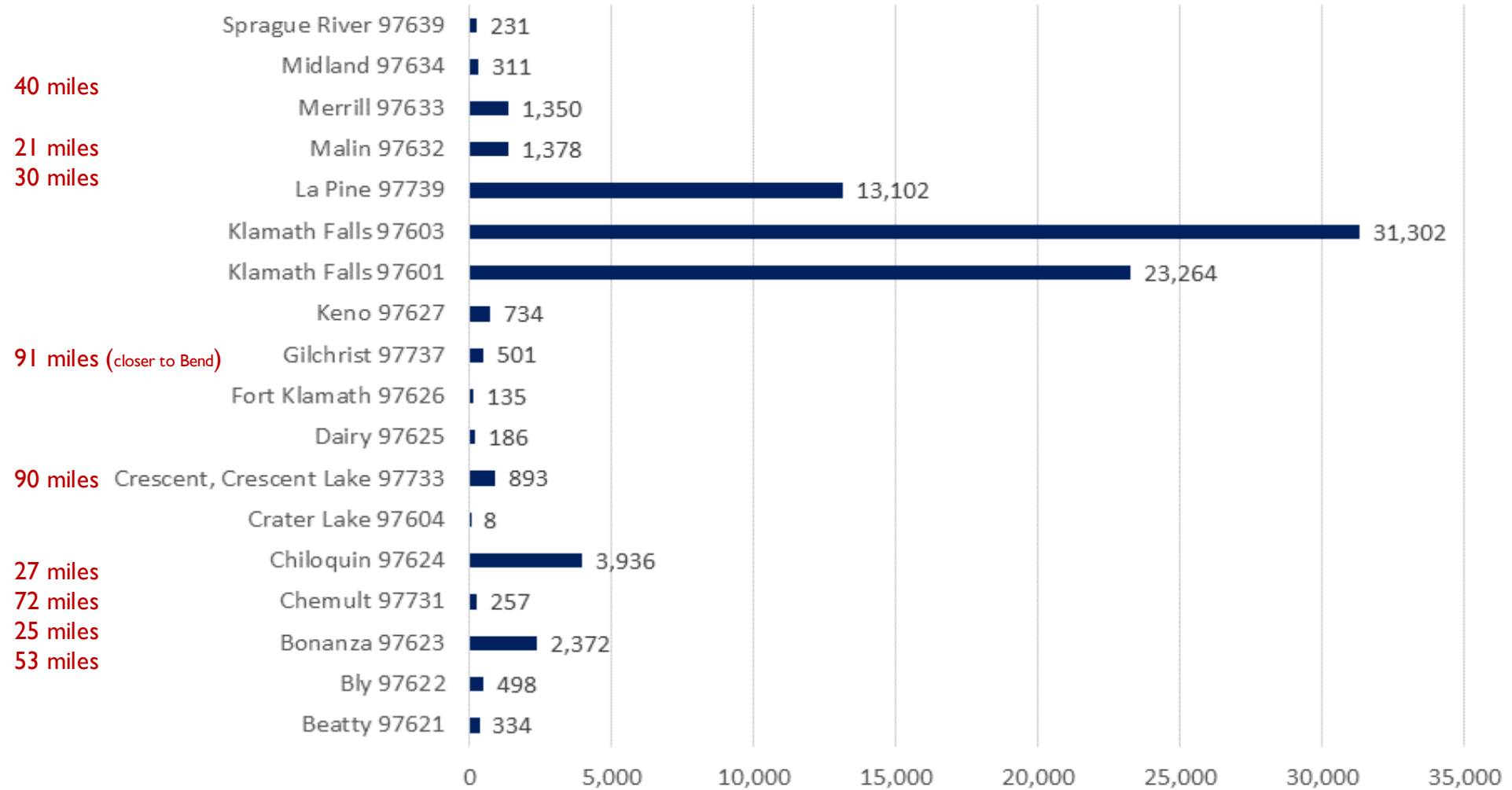
Photo credit: KDRV.com Wings and Eagles Air Show 2025



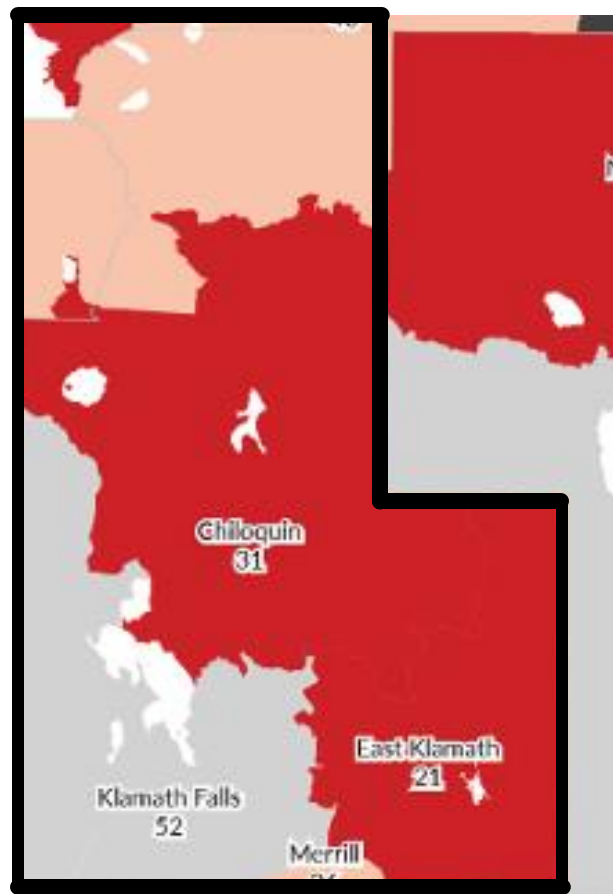
Photos: View of the Basin from Brown Mountain (above), Wood River headwaters at Kimball State Park (left)

Distance to KF

Population by zip code



2024 OHSU AREAS OF UNMET HEALTHCARE NEEDS REPORT



<i>Greatest Unmet Need Areas</i>	<i>2024</i>	<i>2023</i>
East Klamath	21	26
Warm Springs	25	22
Glendale	28	29
Shady Cove	30	37
Chiloquin	31	35
Drain/Yoncalla	32	32
Oakridge	32	37
Port Orford	32	34
Powers	32	36
North Lake	34	32
Cascade Locks	34	39
Swisshome/Triangle Lake	34	28

OHSU NURSING SCHOOL AND COMMUNITY PARTNERSHIPS

- Integrates students into community health projects
- Classes focus on community health
 - Population Health class
 - Leadership and Quality Improvement Class
 - Street Nursing Team
- Students are assigned to various community organizations and must complete 165 hours per term

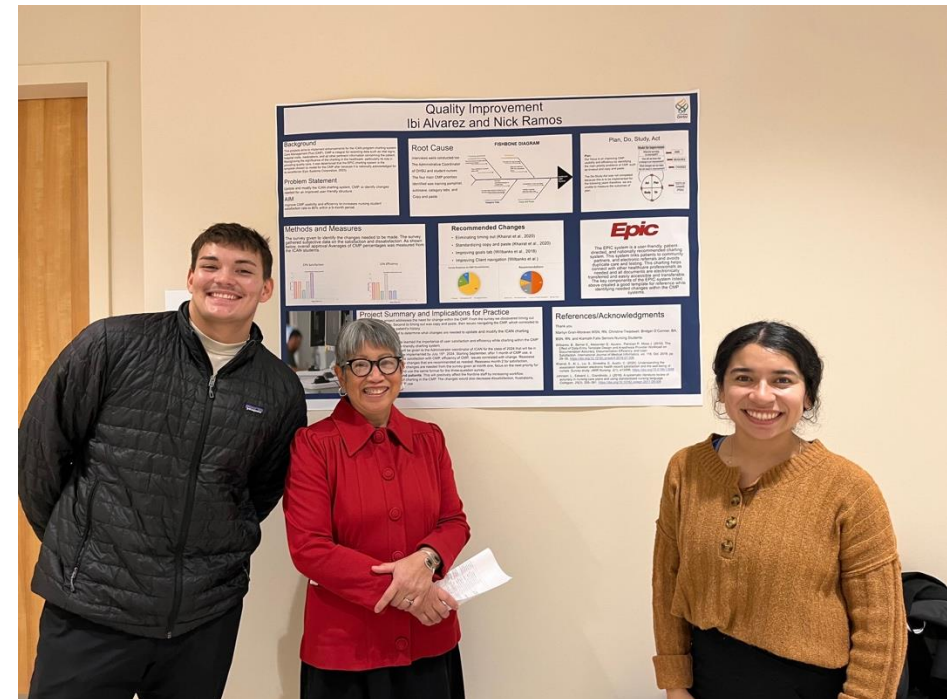


Photo: Marilyn Gran-Moravec with nursing students during poster presentations

MODERNIZATION



PUBLIC HEALTH EMERGENCY PREPAREDNESS

CDC's Emergency Preparedness | 5 core capabilities

Capability 8: Medical Countermeasure Dispensing and Administration

Definition: Medical countermeasure dispensing and administration is the ability to provide medical countermeasures to targeted population(s) to prevent, mitigate, or treat the adverse health effects of a public health incident, according to public health guidelines. This capability focuses on dispensing and administering medical countermeasures, such as vaccines, antiviral drugs, antibiotics, and antitoxins.

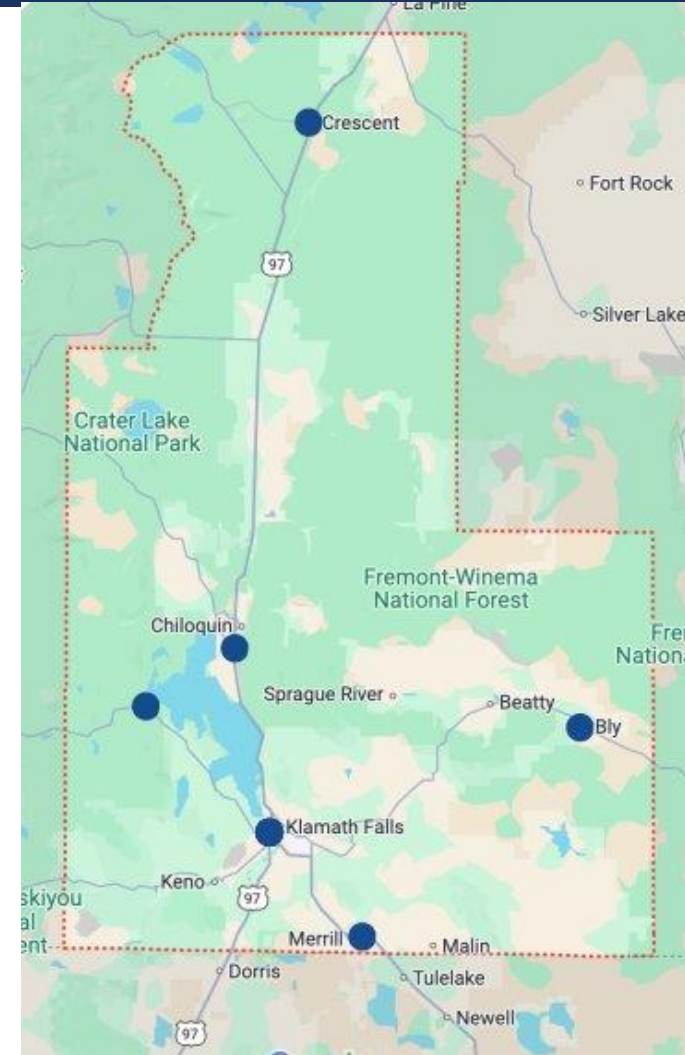
Functions: This capability consists of the ability to perform the functions listed below.

- Function 1: Determine medical countermeasure dispensing/administration strategies
- Function 2: Receive medical countermeasures to be dispensed/administered
- Function 3: Activate medical countermeasure dispensing/administration operations
- Function 4: Dispense/administer medical countermeasures to targeted population(s)
- Function 5: Report adverse events

KCPH AND OHSU S.O.N. PARTNERSHIP OPPORTUNITY

KCPH's emergency preparedness work

- Opportunity to update POD plan
- Opportunity to run exercises and “stress test” locations
- Opportunity for PDSA for quality improvement
- Large geographic area
- Limited resources and capacity
- OHSU Leadership students to provide capacity

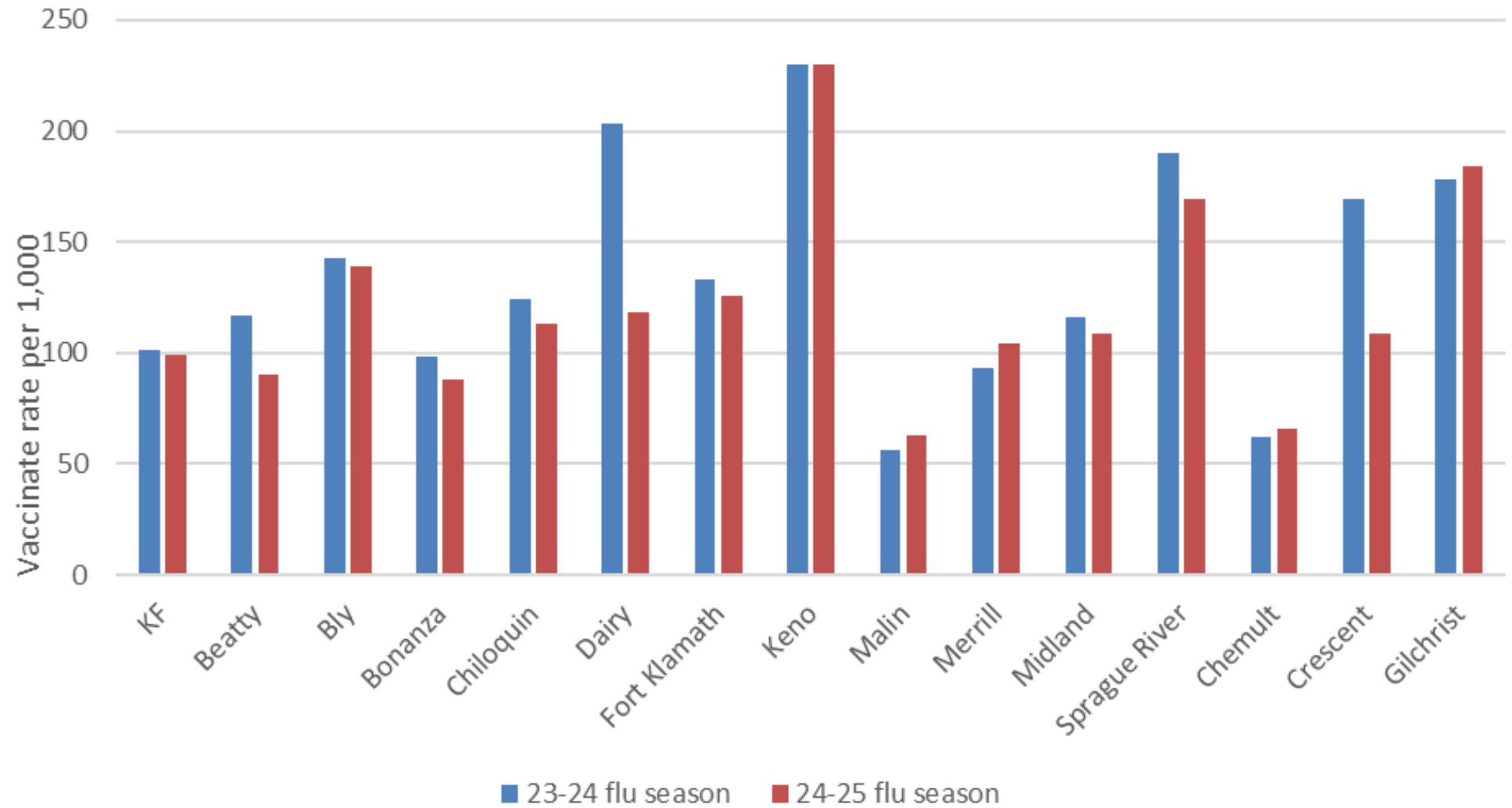


WHAT IS A POD?

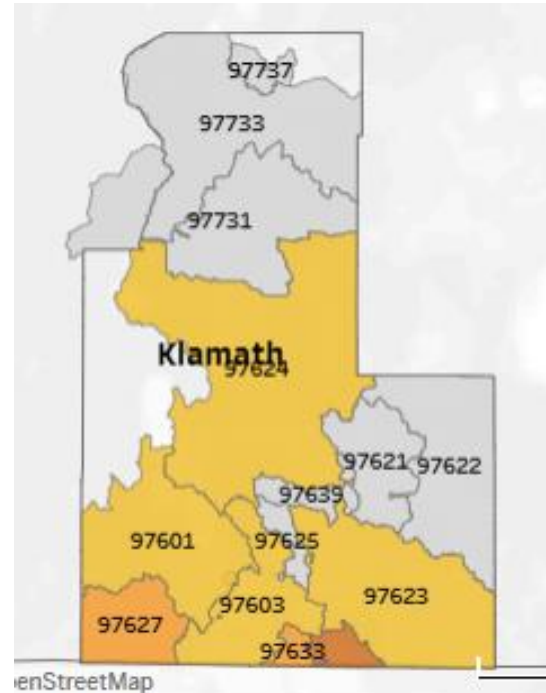
Point of distribution

- A temporary site set up during or after a public health emergency to distribute essential resources
 - Vaccines or medications
 - Food and water
 - Medical supplies or other resources
- In a central location convenient for citizens to access
 - Without a POD citizens may not be able to access the resource or would have high barriers to access

65+ year old flu vaccination rate by flu season



2 YEAR OLD IMMUNIZATION SERIES BY ZIP CODE



Klamath

County Overview

4313314

65.8%

< 50%

50-69%

70-79%

≥ 80%

n/a, <10 kids

AIM STATEMENT

- Increase POD locations from 0-5 by January 2025 in outlying communities
- Test run vaccine clinics and identify areas for improvement
- Document identified locations for POD plan



Photo: Crater Lake National Park



PLAN CLINICS IN OUTLYING LOCATIONS



Photo credit: Jesse Hunt, KBBH



Photo: (Left): Bly vaccine clinic (Above): Yulisa Alonzo, Cortnei Frei, Michael Irvine, and Brianna Saude

STREET NURSING TEAM ADDITION

- Enhance services
- Develop connections with community
- Part of medical countermeasures may be geared towards a specific population rather than a geographic area



Photo: (Left) Mya Raunig & Daniel Mendez; (Above) Heston Kent and Anissi Aispuro

IMPLICATIONS FOR PRACTICE



STRENGTHENED BY OHSU
NURSING STUDENT
INVOLVEMENT



IMPROVES VACCINE
EQUITY AND RURAL
HEALTH OUTCOMES



SUPPORTS WORKFORCE
READINESS IN RURAL
COMMUNITIES

THRIVE CHURCH- WARMING SHELTER FOR UNHOUSED

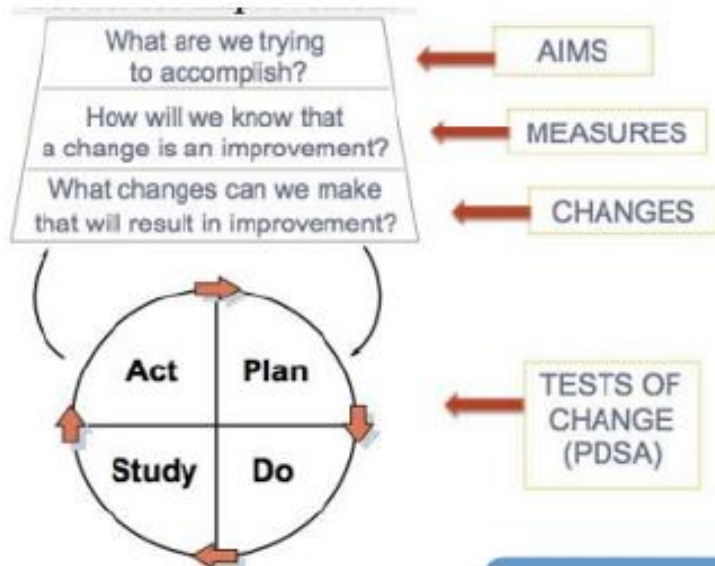


Photo: Street nursing team foot soaks at Thrive Church warming center

RESULTS

Vaccines	Bly	Merrill	Senior Center x2	Rocky Point	Crescent x2	Warming Shelter
Flu	2	19	9	4	32	7
High dose flu	10	10	39	6	24	1
Covid	3	11	21	10	33	0
Hep A	-	-	-	-	-	7

MODEL FOR IMPROVEMENT



Areas for improvement identified

- Additional advertising
- Portable privacy curtains



YULISA ALONZO & BRIANNA SAUDE

POD PLANS

PROBLEM STATEMENT

Despite the availability of vaccines, many individuals cannot access them in public health emergencies due to limited locations for vaccine access close to them. This inequity in vaccine access can lead to increased rates of preventable diseases and contribute to health disparities within communities.

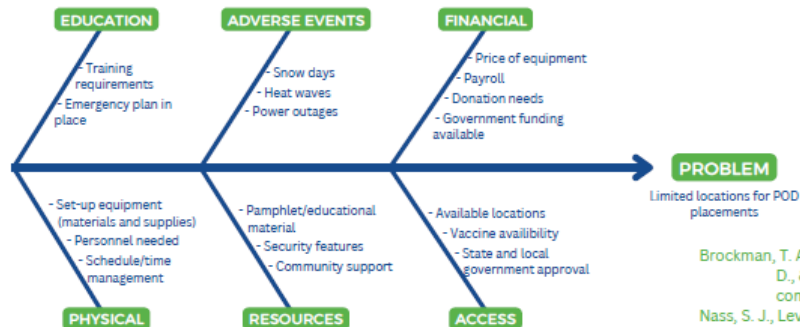
Establishing vaccine PODs can help overcome barriers by ensuring vaccines are distributed fairly and equitably regardless of socioeconomic status, race, ethnicity, or geographic location.

"When a lot of people in a community are vaccinated the pathogen has a hard time circulating because most of the people it encounters are immune" (WHO, 2020).

ROOT CAUSES

1. Klamath County is such a large geographical area, that it can not be serviced by one location
2. Activation and operation plan not revised or finalized
3. Stress test not planned, designed, or conducted

FISHBONE ANALYSIS



AIM STATEMENT

To increase emergency vaccine POD locations from 0-5 by January 2025 in rural communities within Klamath County

METHODS AND MEASURES

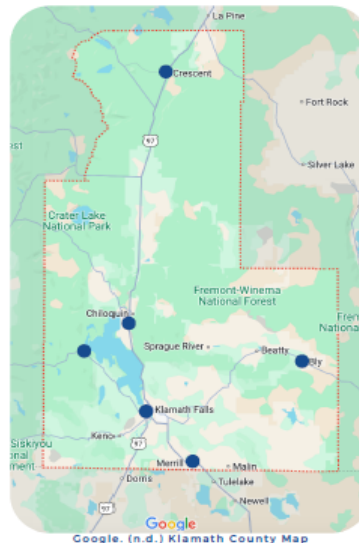
PROCESS: Identify and communicate with point of contact for each rural location find potential locations for use.

OUTCOME: 6 locations secured for possible POD pop-ups in the event of emergencies (Visualized on MAP to the right)

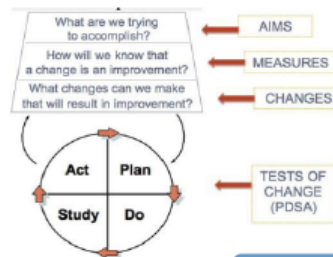
CHANGES

Implementing physical partitions, such as curtains or temporary walls, can create more private spaces for individuals receiving vaccinations. This is important due to the fact that "without some assurance of privacy, people may be reluctant to provide candid and complete disclosures of sensitive information even to their physicians" (Nass et al., 2009).

Effective community outreach and advertising can significantly improve attendance rates (Brockman et al., 2023). For example, using social media and flyers could increase engagement and participation from the public. By informing the public about upcoming POD locations and encouraging timely vaccination, we can maximize the impact of these initiatives.



MODEL FOR IMPROVEMENT



PROJECT SUMMARY AND IMPLICATIONS FOR PRACTICE

We successfully exceeded our project's goal of securing five potential POD locations in rural Klamath County, identifying six locations: Klamath Falls, Chiloquin, Merrill, Bly, Rocky Point, and Crescent. Successful test runs in Bly, Klamath Falls, Rocky Point, and Crescent demonstrated the feasibility of POD deployment in these areas.

We learned how important community engagement is, emphasizing the importance of strong relationships with local leaders and organizations. The project's success underscores the need for flexibility and adaptability in responding to public health emergencies.

Future steps include passing the baton to KCPH so they can finalize the operational plan, continue monitoring and evaluation, and ensure efficient logistics and staffing. Unfortunately, we cannot put a specific timeline for their completion of the final POD plans; however, we estimate that by the end of 2025, PODs will be in use regularly.

By increasing POD locations, this project will alleviate the burden on healthcare workers and improve vaccine access for rural residents, ultimately contributing to better public health outcomes.

ACKNOWLEDGEMENTS

We are incredibly grateful for the Klamath Public Health Department for allowing us to gain experience at their site. We would like to thank Kellie Hansen, Jennifer Little, and Jessica Dale for their guidance and support throughout this process. Last but not least, a huge thank you to our clinical advisor, Lyn Callahan for trusting us, and motivating us through this project.

REFERENCES

- Brockman, T. A., Shaw, O., Wierper, L., Nguyen, Q. A., Kelpin, S. S., West, I., Albertie, M., Williams, S., Abbenyi, A., Stephenson, N., Almader-Douglas, D., & Patten, C. A. (2023). Community engagement strategies to promote recruitment and participation in clinical research among rural communities: A narrative review. *Journal of Clinical and Translational Science*, 7(1). <https://doi.org/10.1017/cts.2023.16>
- Nass, S. J., Levit, L. A., Gostin, L. O (2009). *Beyond the HIPAA Privacy Rule: Enhancing Privacy, Improving Health Through Research*. National Academies Press (US). <https://pubmed.ncbi.nlm.nih.gov/20662116/>
- WHO (World Health Organization). (2020, December 8). How do vaccines work?. <https://www.who.int/news-room/feature-stories/detail/how-do-vaccines-work>

STUDENT FEEDBACK

We learned how important community engagement is, emphasizing the importance of strong relationships with local leaders and organizations. The project's success underscores the need for flexibility and adaptability in responding to public health emergencies.

ACKNOWLEDGEMENTS

OHSU School of Nursing

- Yulisa Alonzo
- Brianna Saude
- Street Nursing Team students

Community partners and advisors



Photo credit: Cyndi Kallstrom

QUESTIONS?



Marilyn Gran-Moravec, MSN, RN

Assistant Professor of Clinical
Nursing

Street Nursing Team Faculty in
Residence

granmora@ohsu.edu

541-273-7654

Jennifer Little, MPH

Director

Klamath County Public
Health

jlittle@klamathcounty.org

541-882-8846

