

**Participant/Invitee and Follow-Up Resource List
Farmworker Health, Climate Change, and Environmental Justice
Wednesday, January 17, 2024 | Woodburn, Oregon**

Thank you very much for joining U.S. Department of Health and Human Services (HHS) Assistant Secretary for Health Admiral Rachel Levine on January 17, 2024 for a virtual community discussion on farmworker health, climate change, and environmental justice. While we were not able to meet in-person due to the inclement weather, we are so appreciative of your time and hope that you all have continued to stay safe. Many thanks again to Dr. Jennifer Martinez-Medina, Assistant Professor and Community Researcher at Willamette University for her partnership in organizing this event, and to Reyna Lopez, Executive Director of Pineros y Campesinos Unidos del Noroeste (PCUN), for hosting the roundtable discussion.

This document is intended to provide relevant follow-up and resource information. Please see below:

- 1) All Participants/Invitees by Organization**
- 2) Virtual Caravan Materials**
- 3) Resources on Topics Referenced at the Roundtable Discussion**
- 4) U.S. Department of Health and Human Services Programs Related to Farmworker Health and Climate Change: Focus on Heat and Wildfire Smoke**

Feel free to contact our team at the Office of the Assistant Secretary for Health (OASH) anytime if we can be of assistance:

- Ana Mascareñas, Senior Advisor for Environmental Justice and Climate Change, ana.mascareñas@hhs.gov, (202) 209-1026
- Renée Bouvion, Regional Health Administrator, renee.bouvion@hhs.gov, (202) 815-1968
- Dr. Sharunda Buchanan, Interim Director, Office of Environmental Justice, OEJ@hhs.gov

1) All Participants/Invitees by Organization

Community-Based Organizations

- Rosa Andalón, Real Estate Development Director, Casa of Oregon
- Zaira Sanchez, Director of Community Organizing, Oregon Rural Action
- Ubaldo Hernandez, Executive Director, Comunidades
- Jennifer Martinez-Medina, Assistant Professor and Community Researcher, Willamette University
- Dagoberto Morales UNETE Center for Farmworker Advocacy
- Silvia Muñoz Lozano, Workforce Program Director, Oregon Human Development Corporation

- Itzel Hernandez Spehar, Director of Advocacy and Community Services Bienestar
- Reyna Lopez, Executive Director, Pineros y Campesinos Unidos del Noroeste (PCUN)
- Valentin Sanchez, Senior Paralegal, Oregon Law Center
- Arturo Sarmiento, Radio Poder
- Xitlali Torres, Air Quality and Climate Program Coordinator, Verde
- Miriam Vargas Corona, Executive Director, Unidos Bridging Community

Students, Academic and Other Partners

- Maddie Berry, Student, Willamette University
- Ben Duncan, Member, Oregon Environmental Justice Council
- Melinda Butterworth, Associate Professor of Environmental Science, Willamette University
- Serina Fast Horse, Co-Director, Northwest Environmental Justice Center, Willamette Partnership
- Ladan Ghahramani, Co-Director, Northwest Environmental Justice Center, Willamette Partnership
- Alexia Gookin-Lopez, Student, Willamette University
- Nicole Iroz-Elardo, Assistant Professor in the Public Health, Ethics, Advocacy, and Leadership (PHEAL) program, Willamette University

State and Local Government

- Cara Biddlecom, Oregon Health Authority, Interim State Public Health Director
- Naomi Biggs, Public Health Administrator, Polk County
- Shannon Davis, Deputy Director, Oregon Department of Environmental Quality
- Jessica Giannettino Villatoro, Oregon Bureau of Labor and Industries, Deputy Labor Commissioner
- Fernando Gutierrez, Oregon Employment Department, State Monitor Advocate
- Katrina Griffith, Deputy Director, Marion County Health & Human Services
- Michael Keuler, Environmental Health Resiliency Coordinator, Marion County Health Promotion & Prevention Services
- Jonathan Sandau, Assistant Director, Oregon Department of Agriculture
- Renée Stapleton, Administrator, Oregon OSHA
- Amanda Faulkner, Acute and Communicable Disease, Oregon Health Authority
- Eric Gebbie, Health Security, Preparedness and Response, Oregon Health Authority
- Gabriela Goldfarb, Environmental Public Health Section Manager, Oregon Health Authority
- Hoang-Van Nguyen, Environmental Justice Council and Policy Coordinator, Oregon Department of Environmental Quality
- Daniel Quiñones, Oregon Employment Department
- Alan Martinez, Environmental Public Health, Oregon Health Authority
- Jonathan Modie, External Relations Division, Oregon Health Authority
- Britt Parrott, External Relations Division, Oregon Health Authority

- Benita Picazo, MSFW Outreach Manager, Oregon Employment Department
- Oliver Vera, Community Partner Outreach Program Director, Oregon Health Authority

Federal Government

- Jody Becker, Regional Administrator, HHS Administration for Children and Families
- Renée Bouvion, Regional Health Administrator, HHS Office of the Assistant Secretary for Health
- Sharon Turner, Regional Administrator, HHS Health Resources and Services Administration
- Ana Mascareñas, Senior Advisor for Environmental Justice and Climate Change, HHS Office of the Assistant Secretary for Health
- Gustavo Guerrero, Mid-Wilamette Valley & North Coast Field Rep., Office of U.S. Senator Jeff Merkley
- Sydney Hurst, Project Officer, U.S. Environmental Protection Agency, EPA Region 10, Environmental Justice

2) Resources on Topics Referenced at the Roundtable Discussion

- Oregon COVID-19 Farmworkers Study. [Phase One Final Report: COVID-19's Disproportionate Impact on Oregon Farmworkers is Far-Reaching and Long-Term](#) (2021). A collaborative research project with participation from a wide group of community-based organizations, researchers, and policy advocates.
- [Cultivating Home: A Study of Farmworker Housing in Hood River, Marion, Morrow, and Yamhill Counties in Oregon \(2023\)](#). A report sponsored by the State of Oregon Department of Housing & Community Services.
 - [Cultivando el Hogar: Un estudio de viviendas para trabajadores agrícolas](#). Este Proyecto e informe han sido financiados por el Departamento de Vivienda y Servicios Comunitarios de Oregon (Oregon Housing and Community Services Department, OHCS).
- State of Oregon OSHA's rules on heat and wildfire smoke:
 - [Protection From Wildfire Smoke Rules Key Requirements](#) - Fact sheet describing the key requirements of Oregon OSHA's permanent rules for protection from wildfire smoke, effective July 1, 2022.
 - [Requisitos clave: reglas para la protección contra el humo causado por los incendios forestales](#). A partir del 1.º de julio de 2022, las reglas adoptadas por Oregon OSHA se aplicarán a los empleadores cuyos empleados estén expuestos a peligrosos de humo causado por los incendios forestales.

- [HHS Office for Civil Rights Language Access report \(2023\) | press release May 24, 2023](#) – A report summarizing the progress HHS has made on improving the provision of meaningful access to language assistance services to persons with limited English proficiency (LEP). The report also identifies steps to continue and strengthen this work across HHS moving forward.
 - [Oficina de Derechos Civiles del HHS Informe anual sobre el progreso del acceso lingüístico \(2023\) | comunicado de prensa en español 24 mayo 2023](#) – Un informe que resume el progreso que el Departamento ha logrado para mejorar la provisión de acceso significativo a los servicios de asistencia lingüística a personas con dominio limitado del inglés (LEP, por sus siglas en inglés). El informe también identifica los pasos para continuar y fortalecer este trabajo en todo el HHS en el futuro.
- [HHS Environmental Justice Community Innovator Challenge](#) – **Phase 1 deadline extended to February 13, 2024**. A nation-wide HHS Challenge to support disadvantaged communities and Tribes facing the brunt of environmental injustices, including health harms due to climate change. This Challenge aims to uplift community-level solutions to address health inequities with prizes totaling \$1,000,000 that will be awarded in two phases.
- U.S. EPA [Pesticides; Request for Stakeholder Input on the Proposed Design of Assistance Agreements for a National Farmworker Training and Education Program; Notice of Availability and Opportunity for Comment](#) (Jan 25, 2024 – comments close March 25, 2024)

(3) Virtual Caravan Materials

- “Virtual Caravan of Climate Change for Willamette Valley Farmworkers”. Slides developed and co-narrated by Dr. Jennifer Martinez-Medina, Willamette University, and Valentin Sanchez, Oregon Law Center.
- “Linguistic diversity among farmworkers in Oregon”. Slides not presented due to connectivity issues, but developed and provided as a resource for this event by Dr. Gabriela Pérez Báez, University of Oregon.

Presentation slides follow on pages 5-18 of this document.

Presentation Prepared By: Jennifer Martinez-Medina, PhD
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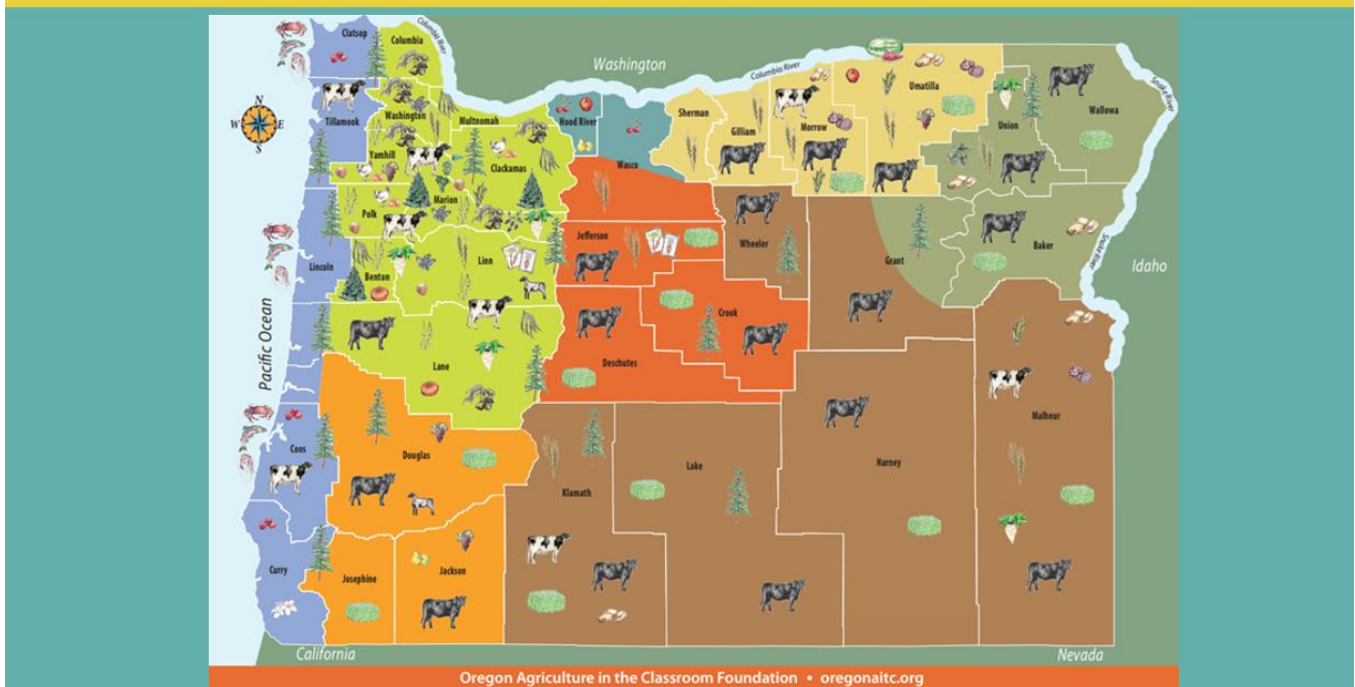
Virtual Caravan of Climate Change for Willamette Valley Farmworkers



U.S. HHS Visit to Oregon
Jan 17, 2024

Presentation Prepared By: Jennifer Martinez-Medina, PhD
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Willamette University | Pronouns: She/Her/Ella
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Welcome to Oregon



Oregon's Ice Storm & ODOT Camera



Source: ODOT

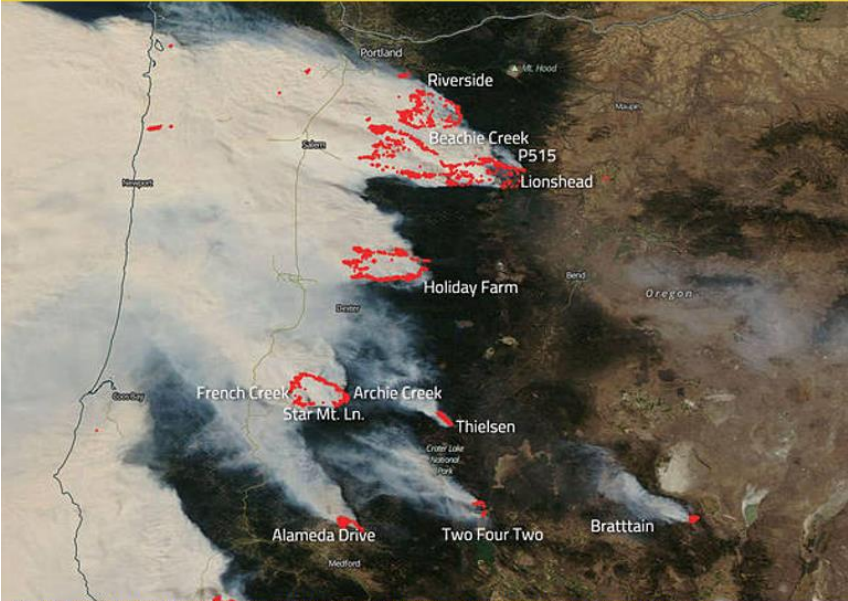
Source: Kepp Portland Weird

Source: TriMet

Farmworkers Always Drive Through Hazardous Roads



Major Climate Events



APOYE A SUS CAMPELINXS LOCALES

¡ENVÍE POR CORREO O DEJE SUS DONACIONES EN PCUN
300 YOUNG ST. WOODBURN, OR 97071

<ul style="list-style-type: none"> LOCIÓN GUANTES PASTA DENTAL MÁSCARAS RN95 CEPILLOS DE DIENTES AGUA EMBOTELLADA TOALLITAS PARA BEBÉS BIBERONES PARA BEBÉS 		<ul style="list-style-type: none"> APERITIVOS FRÍJOLES Y ARROZ ACEITE DE COCINA DESODORANTE NUEVAS COBIJAS PILAS AA Y AAA PAPEL HIGIÉNICO FÓRMULA PARA BEBÉS
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Source: Screenshot from Oregon Department of Emergency Management, State of Oregon Fires and Hotspots Dashboard
State of Oregon Fires and Hotspots Dashboard (September 2020)

Source: PCUN

Portland to St. Paul



Image capture: May 2019 © 2024 Google

Theme: Extreme Heat



Location 1: Ernst Nursery & Farms



Sebastian Francisco Perez

1983 - 2021



ALISHA JUCEVIC/REUTERS/ALAMY



COURTESY OF THE PEREZ FAMILY VIA ROLLINGSTONE MAGAZINE, 2021

St. Paul to Woodburn



Theme: Housing



Source: Google



Source: Low income housing near Salem, Oregon. 1968. Oregon Historical Society.

Location 2 - Coleman Ag Farm Labor Housing



Image capture: May 2019 © 2024 Google United States Terms Privacy Report a job

Making our way into the city



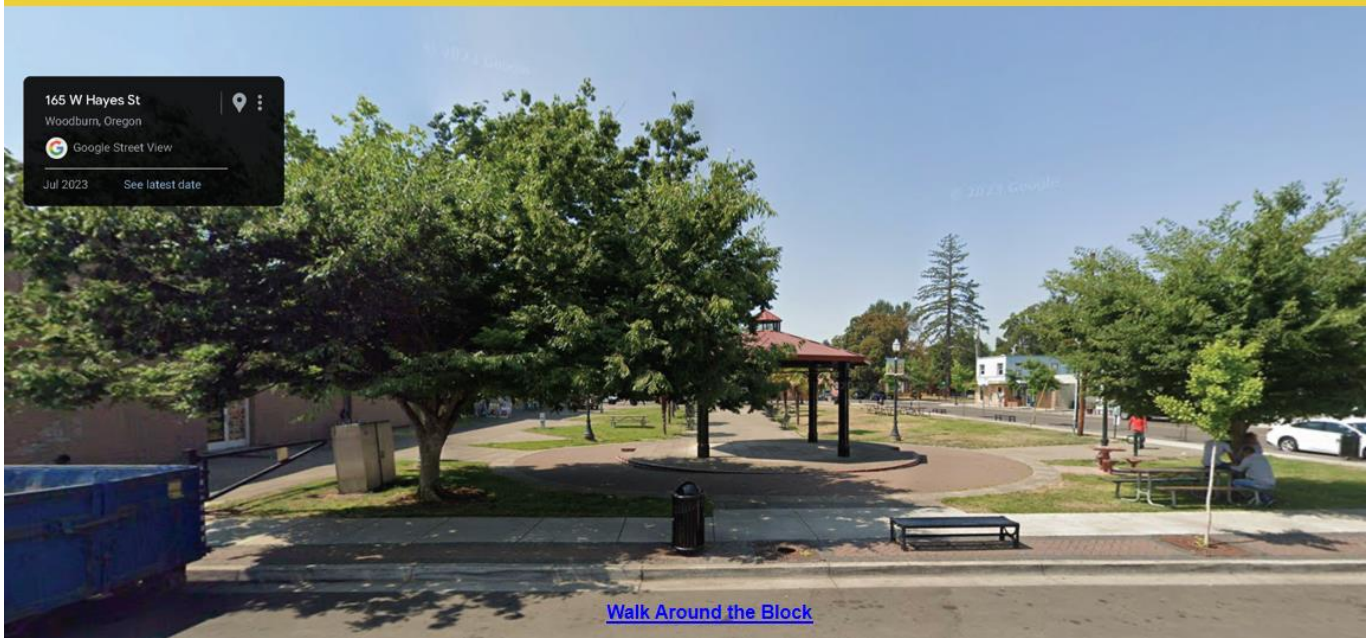
Theme: Cultural Belonging & Diversity of Farmworkers

◀ **TRANSBORDER LIVES** ▶
Indigenous Oaxacans in Mexico, California, and Oregon

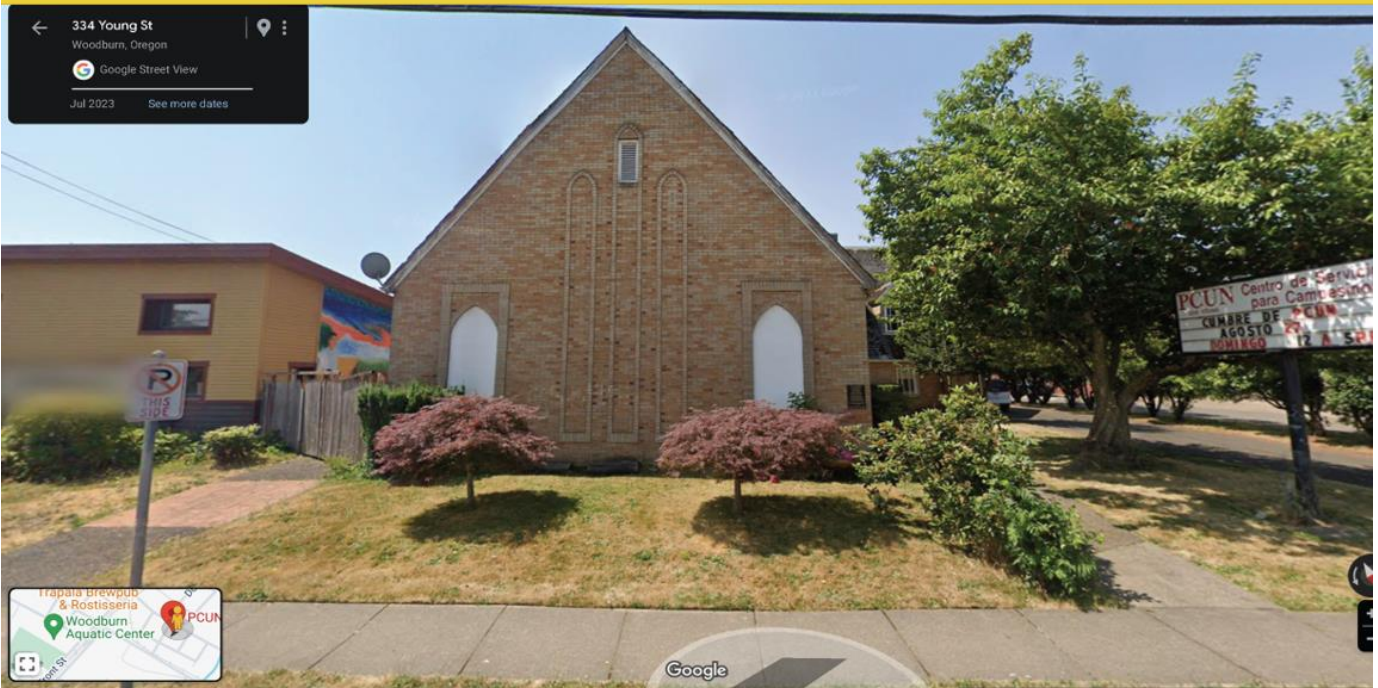
LYNN STEPHEN

Source: PCUN Mural.

Location 3 - Woodburn Downtown La Placita



Thank you for Riding!



Linguistic diversity among farmworkers in Oregon

GABRIELA PÉREZ BÁEZ, PHD (GPEREZB4@UOREGON.EDU)

LANGUAGE REVITALIZATION LAB

ASSOC. PROFESSOR, DEPT. OF LINGUISTICS, UNIVERSITY OF OREGON

Oregon

Population 5 years and over	4,035,825
Speak only English	3,423,034
Speak a language other than English	612,791

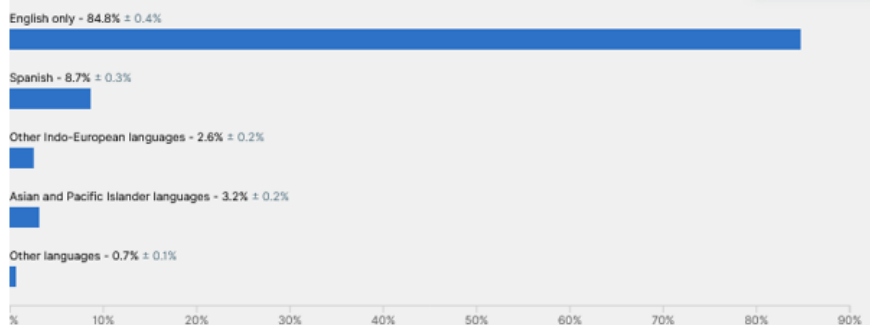
Language Spoken at Home

15.2% ± 0.4%
Language Other Than English Spoken at Home in Oregon

21.6% ± 0.1%
Language Other Than English Spoken at Home in United States

S1601 | 2021 American Community Survey 1-Year Estimates

Types of Language Spoken at Home in Oregon





Languages

Four Major Language Groups

Spanish includes Spanish, Spanish Creole, and Ladino.

Other Indo-European Languages include most languages of Europe and the Indic languages of India. These include the Germanic languages such as German, Yiddish, and Dutch; the Scandinavian languages such as Swedish and Norwegian; the Romance languages such as French, Italian, and Portuguese; the Slavic languages such as Russian, Polish, and Serbo-Croatian; the Indic languages such as Hindi, Gujarati, Punjabi, and Urdu; Celtic languages; Greek; Baltic languages; and Iranian languages.

Asian and Pacific Island Languages include Chinese; Korean; Japanese; Vietnamese; Hmong; Khmer; Lao; Thai; Tagalog or Filipino; the Dravidian languages of India such as Telugu, Tamil, and Malayalam; and other languages of Asia and the Pacific, including the Philippine, Polynesian, and Micronesian languages.

All Other Languages include Uralic languages such as Hungarian; the Semitic languages such as Arabic and Hebrew; languages of Africa; Native North American languages, including the American Indian and Alaska Native languages; and indigenous languages of Central and South America.

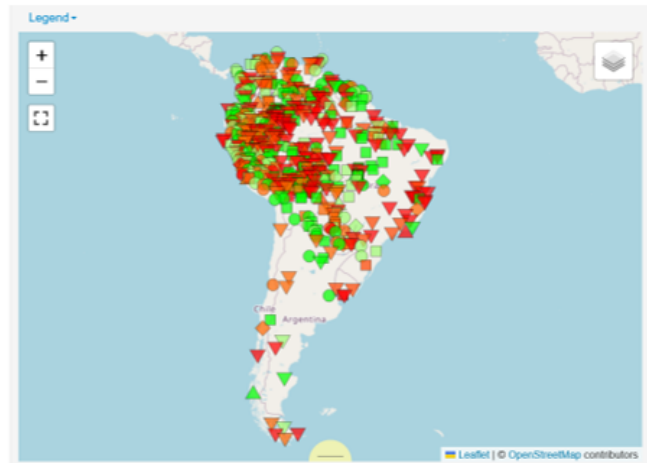
LABELS OBSCURE DIVERSITY

Spanish

- 2-dozen countries where Spanish is a dominant language but where other languages are Indigenous

Source: Dietrich and Hernandez 2022

Close to 1,000 Indigenous languages!



Source: <http://glottolog.org>, Accessed on 2023-03-15

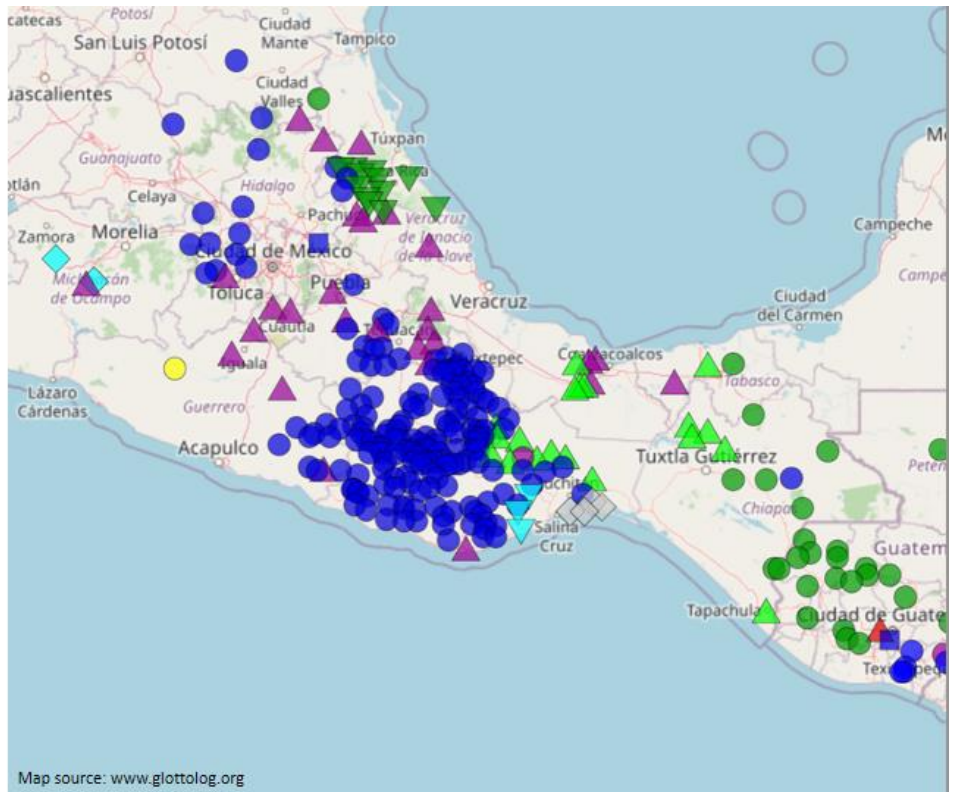
Our focus: Mesoamerica

The agricultural and forestry industries in the PNW are powered by workers from Guatemala and Mexico

Guatemala and the southern half of Mexico are in what is known as Mesoamerica.

This is a region of shared cultural and linguistic traits, and tremendous diversity.

There are **a few hundred distinct languages**—the precise number is unknown!



Mesoamerican Indigenous Languages

NOT related to Spanish even though Mesoamerica is part of what is commonly referred to as Latin America

Contemporary Mesoamerican languages can be traced back to as late as 600 BCE and as early as 1200 BCE.

Mesoamerica innovated in writing systems in the continent, with epigraphic systems dating back to at least 150 BCE.

Mesoamerican languages predate **by many hundreds of years** Spanish and any other European languages brought by settlers during colonization after the 15th century.



Fig. 2. Drawing of La Mojarra Stela 1.
Source: Justeson and Kaufman 1993



Initial exploration

Farmworkers kept our state's food industry working while many of us stayed home to protect ourselves. Even during the 2020 wildfires!

Study sought to elucidate the impact of the COVID-19 pandemic on the well-being of farmworkers



Findings: languages

Among 300 farmworkers in Oregon

- 58 were speakers of an Indigenous **Mesoamerican** language
- 29 different Mesoamerican languages were reported



Findings: Mesoamerican languages

Language family/group		Languages
Amuzgo	1	Guerrero Amuzgo
Chinantec	1	Chinanteco central bajo
Huichol	1	
Mayan	4	Kanjobal, K'iche', 2 Mam
Mixtec	8	2 Alto, 3 Bajo, 2 Guerrero, Tezoatlán
Nahuatl	7	Sierra de Puebla, 2 Sierra Negra, Mexicano de Guerrero, Mexicano de la Huasteca, Huaxcaleca, Orizaba
Otomi	1	Del oeste
Purepecha	2	Purepecha, Western Highland Purepecha
Triqui	1	San Juan Copala
Zapotec	3	Western Tlacolula, Loxicha, Ocotlán

3/16/2023

HONORING LANGUAGE DIVERSITY - PEACEHEALTH VIRTUAL SUMMIT

9

Mapping Mesoamerican Indigenous Languages and Communities in Oregon

OTOMANGUEAN

- Zapoteco:
 - Ocotlán (Santiago Apóstol), Cuatecas Altas, San Pedro el Alto, Los Naranjos Esquipula
- Mixteco:
 - Tlapa (Guerrero), Metlatonoc, Yosoyua, Plan de Guadalupe, San Martín Duraznos, Sta. Catarina Noltepec, San Miguel el Grande, San Juan Ixtepec
- Amuzgo
- Triqui:
 - San Martín Itunyoso

MAYAN

- Mam
 - Todos Santos Cuchumatán
 - Chiantla
- Acateco
- Chuj
- Kanjobal
- Kiché
- Poptí
- Tzeltal

OTHER

- Tarasco
- Nahuatl: Tlazcantla, San José Miahuatlán, Zongolica

xtyozen yuad
(Quiaviní Zapotec)

GRACIAS

xquixepe' laatu
(Isthmus Zapotec)

THANK YOU

(4) U.S. Department of Health and Human Services Programs Related to Farmworker Health and Climate Change: Focus on Heat and Wildfire Smoke

This non-exhaustive list of resources aims to capture current HHS programs and actions that relate to protecting farmworker health from the effects of wildfire smoke and heat.

Office of Climate Change and Health Equity (OCCHE) Heat and Wildfire Tools and Resources

OCCHE shares information on protecting people in the U.S. from extreme heat and wildfire smoke through the Climate and Health Outlook and its associated geospatial platform.¹ OCCHE and the National Highway Traffic Safety Administration (NHTSA) have also launched a new resource called the Heat-Related EMS Activation Surveillance Dashboard. This first-of-its-kind tool maps EMS responses to heat-related illness across the country to help local decision makers and communities prioritize resources and interventions to prevent heat-related illness and save lives.²

National Institute for Occupational Safety & Health (NIOSH) Criteria for a Recommended Standard for Occupational Exposure to Heat and Hot Environments

In 2016, NIOSH updated its Criteria for a Recommended Standard Occupational Exposure to Heat and Hot Environments.³ OSHA published an Advance Notice of Proposed Rulemaking (ANPRM) on Heat Injury and Illness Prevention in Outdoor and Indoor Work Settings (October 27, 2021) that was informed by the NIOSH criteria.⁴ The ANPRM seeks information on issues that OSHA can consider in developing a standard to protect indoor and outdoor workers from hazardous heat.

The 2016 criteria recommend that a Federal heat standard include provisions for medical screening and physiological monitoring, heat stress thresholds, rest breaks, hydration, shade, acclimatization plans, engineering controls (e.g., air conditioners, fans, tents), administrative controls (e.g., rest breaks and altered work schedules), PPE and auxiliary body cooling (e.g., cooled or iced vests, jackets, or other wearable garments), exposure and medical monitoring, hazard notification alerts, worker training and education, medical surveillance, and recordkeeping.

NIOSH Health Hazard Evaluations

The Health Hazard Evaluation (HHE) Program has helped agricultural workers learn whether health hazards are present at their workplace and how to address them. Learn more: [HHE](#)

¹ <https://www.hhs.gov/climate-change-health-equity-environmental-justice/climate-change-health-equity/climate-health-outlook/index.html>

² <https://nemsis.org/heat-related-ems-activation-surveillance-dashboard/>

³ <https://www.cdc.gov/niosh/docs/2016-106/>

⁴ <https://www.federalregister.gov/documents/2021/10/27/2021-23250/heat-injury-and-illness-prevention-in-outdoor-and-indoor-work-settings>

[Program: What Employers Should Know | NIOSH | CDC](#) and [HHE Program: What Employees Should Know | NIOSH | CDC](#). Request a Health Hazard Evaluation, [online](#) or fill out the form:

- [Request for Health Hazard Evaluation](#) (PDF)
- [Solicitud de evaluación de riesgos para la salud](#) (PDF)

NIOSH Centers for Agricultural Safety and Health

The 12 Centers for Agricultural Safety and Health represent a major NIOSH effort to protect the health and safety of workers in the agriculture, forestry, and fishing sector. The Centers were developed by a cooperative agreement to conduct research, education, and prevention projects to address the nation's pressing agricultural, forestry and fishing health and safety problems. The Centers primarily focus on research, though they do test interventions in the field. For example, in Florida, the Pesticide & Heat Stress Education for Latino Farmworkers that is Culturally Appropriate (PISCA) project developed a widely used curriculum to help protect outdoor workers on hot days.⁵ PISCA won the Environmental Protection Agency's (EPA) Let's Talk About Heat Challenge.⁶ Another example is the California Heat Illness Prevention Study, which found that nearly 12% of participant farmworkers were dehydrated by the end of the day.⁷ The California study also created new training methods to better prepare workers for hot days. A study in Washington is evaluating whether hot housing conditions may modify the effect of heat strain when working.⁸

Occupational Safety and Health Administration (OSHA) and NIOSH Heat Safety Tool Smartphone App

OSHA and NIOSH co-developed a Heat Safety Tool Smartphone App for both Android and iPhone devices.⁹ The app provides outdoor location sensitive temperature, humidity, and heat index readings, as well as provides a corresponding risk level for ranges of heat index. Each risk level provides relevant information on identifying signs and symptoms of heat-related illness and steps that should be taken at that risk level to prevent heat-related illness. The App is available in Spanish if one's phone is set to Spanish.

Centers for Disease Control and Prevention (CDC) Climate and Health Program

The CDC Heat and Health Tracker provides local heat and health information so communities can better prepare for and respond to extreme heat events. The CDC recently included state-level data from 2011-2020 on heat and worker health from the Bureau of Labor Statistics Occupational Injuries and Illnesses. This new function shows the rate of work-related injuries, illnesses, and fatal injuries, due to heat per 10,000 full-time workers by state for the selected

⁵ <https://www.sccahs.org/index.php/research/pisca-pesticide-heat-stress-education-for-latino-farmworkers-that-is-culturally-appropriate/>

⁶ <https://www.epa.gov/newsreleases/epa-announces-winners-lets-talk-about-heat-challenge>

⁷ <https://aghealth.ucdavis.edu/news/chips-findings>

⁸ <https://deohs.washington.edu/pnash/multi-level-approach-heat-related-illness-prevention-agricultural-workers>

⁹ <https://www.cdc.gov/niosh/topics/heatstress/heatapp.html>

year. The CDC Climate and Health Program also supports a grant recipient in North Carolina that has looked at health impacts of heat in agricultural counties.¹⁰

Administration for Children and Families (ACF) Community Services Block Grant

The Community Services Block Grant works through a network of eligible entities in the reduction of poverty, the revitalization of low-income communities, and the empowerment of low-income families and individuals in rural and urban areas to become fully self-sufficient. The program is administered at the state level and distributed to entities including community action agencies and migrant and seasonal farmworker organizations. In Fiscal Year 2016, the most recent report available, the program reported funding 8 migrant and/or seasonal farm worker organizations in six states (CA, FL, NY, OR, WA, WI).¹¹

Human Resources and Services Administration (HRSA) Funding for Migrant Health Centers

The HRSA Bureau of Primary Health Care administers federal grant support to 1,400 community health centers, including Migrant Health Centers. In 2022, HRSA reported funding 175 Migrant Health Centers serving 843,071 patients.¹² HRSA has a National Advisory Council on Migrant Health that advises HRSA and HHS on migrant health centers; their most recent recommendations are from May 2023.¹³ Relevant recommendations from Advisory Council include the HRSA should provide supplementary funding to enable migrant health centers to provide transportation for patients for ongoing preventive and primary care, and chronic disease management.

HRSA Training and Technical Assistance

HRSA supports several National Training and Technical Assistance Cooperative Agreements (NCAs), including Farmworker Justice, National Center for Farmworker Health, MHP Salud and Migrant Clinicians Network.¹⁴ The NCAs aim to strengthen health center clinical and day-to-day operations and expand their capacity to care for special and vulnerable populations, including people experiencing homelessness, residents of public housing, and agricultural workers and their families. For example, NCAs with Farmworker Justice and the Migrant Clinicians Network supported the development of an updated Workers Compensation and Pesticide Reporting Map.¹⁵ These organizations also created an overview of workers' compensation laws for farmworkers and a systematic guide on how to assess a workplace injury.¹⁶ The NCA with the

¹⁰ <https://epi.dph.ncdhhs.gov/oe/climate/HeatCommunityReadinessReport.pdf>

¹¹ https://www.acf.hhs.gov/sites/default/files/documents/ocs/rpt_csbg_congressional_fy2016.pdf

¹² <https://data.hrsa.gov/tools/data-reporting/special-populations>

¹³ <https://www.hrsa.gov/sites/default/files/hrsa/advisory-committees/migrant-health/nacmh-may-2023-letter-recommendations.pdf>

¹⁴ <https://www.hrsa.gov/library/bphc>

¹⁵ <https://www.migrantclinician.org/pesticide-reporting-and-workers-compensation-agriculture-interactive-map.html>

¹⁶ <https://www.farmworkerjustice.org/resource/a-guide-to-workers-compensation-for-clinicians-serving-agricultural-workers/>

National Center for Farmworker Health, Inc. helps to support the three Migrant Stream Forums, a series of regional forums for farmworker advocates, health and social service providers, policy makers, and other interested individuals. The Migrant Stream Forums provide an opportunity for participants to discuss regional and national trends that affect farmworkers and to share successful strategies for addressing farmworker needs.

National Institutes of Health's (NIH) National Institute of Environmental Health Sciences (NIEHS) Research

NIEHS supports three types of projects that address farmworker exposure to wildfire smoke and extreme heat: developing wearable sensors to warn workers of harmful exposures; understanding the health effects of extreme heat exposure on kidney injury and disease; and providing training to first responders, farmworkers, and others who might be exposed to wildfire smoke. For example, the NIEHS Worker Training Program through various grantees has provided training to migrant farmworkers on emergency response and climate events, with emphasis on heat stress in Puerto Rico and the US Virgin Islands, Ohio, and Maine, and several other states. In addition, NIEHS has recently worked with the National Institute of Diabetes and Digestive and Kidney Disease (NIDDK) and the Fogarty International Center (FIC) to create a new chronic kidney disease consortium (CKDu CURE) that will be measuring heat and many other environmental exposures in agricultural populations outside of the U.S.¹⁷

Please feel free to reach HHS' Office of Environmental Justice at OEJ@hhs.gov for additional support in connecting and learning more about HHS programs.

¹⁷ <https://epi.dph.ncdhhs.gov/oej/climate/HeatCommunityReadinessReport.pdf>