
Oregon COVID-19 Immunization Initiation Among Licensed Healthcare Workers

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Overview

- HCW were prioritized for COVID-19 vaccine eligibility.
- Prior to vaccine rollout, surveys indicated some HCW were hesitant to be the first immunized.
- Concern with initial vaccine uptake in priority phase vs late starts.
- Lack of universal list of HCW; however licensure data is available.
- Using licensure, OHA published a dashboard of HCW COVID-19 1+ dose immunization rates.

So why study this?

- Already out in the news
- If we don't tell the story, then we lose control of how it is spun

Health

More than 4 in 10 health-care workers have not been vaccinated, Post-KFF poll finds

"I would hate for my kids to be cursing me at my grave for not taking it."

By William Wan, Frances Stead Sellers, Naema Ahmed, Emily Guskin

MARCH 19, 2021

Methods

- Licensing board data was for HCW license types representative of those with direct patient contact.
- A challenge in licensing data is multistate licensing- no guarantee that those licensed in Oregon are working here.
- Licensees are surveyed yearly in Oregon about their status and place of employment.
- Licensees were included if they reporting working in Oregon⁽¹⁾.
- Licensees were matched to ALERT IIS COVID-19 based on name string elements and date of birth and records for 1+ dose.

1. Place of employment data was not available for EMS/EMT licensees

Licensing Boards and License Types

Board	License	Employed in Oregon
Nursing	Certified Nursing Assistant (CNA)	12,835
Nursing	Licensed Practical Nurse (LPN)	4,074
Nursing	Registered Nurse (RN)	38,963
Nursing	Nurse Practitioner (NP)	3,359
Nursing	Nurse Anesthetist (CRNA)	378
Medical	Acupuncturist (Lac)	1,405
Medical	Osteopath (DO)	1,422
Medical	Medical Doctor (MD)	11,896
Medical	Physician Assistant (PA)	2,070
Dentistry	Dentist (D/DF)	2,698
Dentistry	Dental Hygienist (RDH)	2,912
Naturopathic	Naturopath (ND)	895
Pharmacy	Pharmacist (RPH)	4,082
Pharmacy	Pharmacy Technician (CPT)	4,832
EMS	Advanced EMT (AEMT)	225
EMS	Emergency Medical Responder (EMR)	1,228
EMS	Emergency Medical Tech (EMT)	6,094
EMS	Intermediate EMT (EMT-I)	715
EMS	Paramedic	4,351
THW Registry	Certified Traditional Health Worker (CTHW)	4,496
Chiropractic	Chiropractor (DC)	1,488
Chiropractic	Chiropractic Assistant (CA)	874
Massage Therapy	Massage Technician (LMT)	5,478
Health Licensing Office	Respiratory Therapist (RT)	1,455
Occupational Therapy	Occupational Therapist (OT)	1,489
Occupational Therapy	Occupational Therapy Assistant (OTA)	330

Matching Process

- Matching was based on
 - First 4 characters of last name
 - First 3 characters of first name
 - Date of birth
- This avoids many common name issues, such as most use-name versus formal name, most misspellings, and oddities such as variations in hyphenations.
- In Oregon, this match is highly unique- testing against full name indicated almost no false positive matches (STAT!!!)
- Oregon shorthand for this type of match: L4F3DOB.

Matching Process (2)

- For one Licensing Board, only year of birth was available. This led to a modified matching process:
- Set a target by the difference in verified matches between L4F3dob and L4F3year in other license boards; (83% of L4F3year matches verified in L4F3dob)
- Create a scoring algorithm based on
 - Residence location (ALERT) vs employment location (licensing)
 - Uniqueness of name
 - Gender and race
- Algorithm led to accepting 81% of L4F3year matches.

Dashboard Components

Dashboard Tabs:

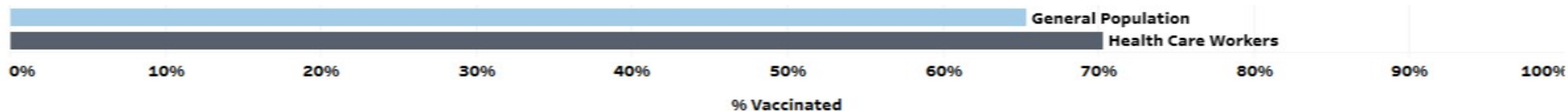
- Overview
- Licenses
- Race/Ethnicity
- County

Link:

<https://public.tableau.com/app/profile/oregon.health.authority.covid.19/viz/OregonHealthCareWorkforceCOVID-19VaccineUptake/Dash-Overview>

High Overall Rates of COVID-19 Vaccination among Licensed Health Care Workers (HCW)

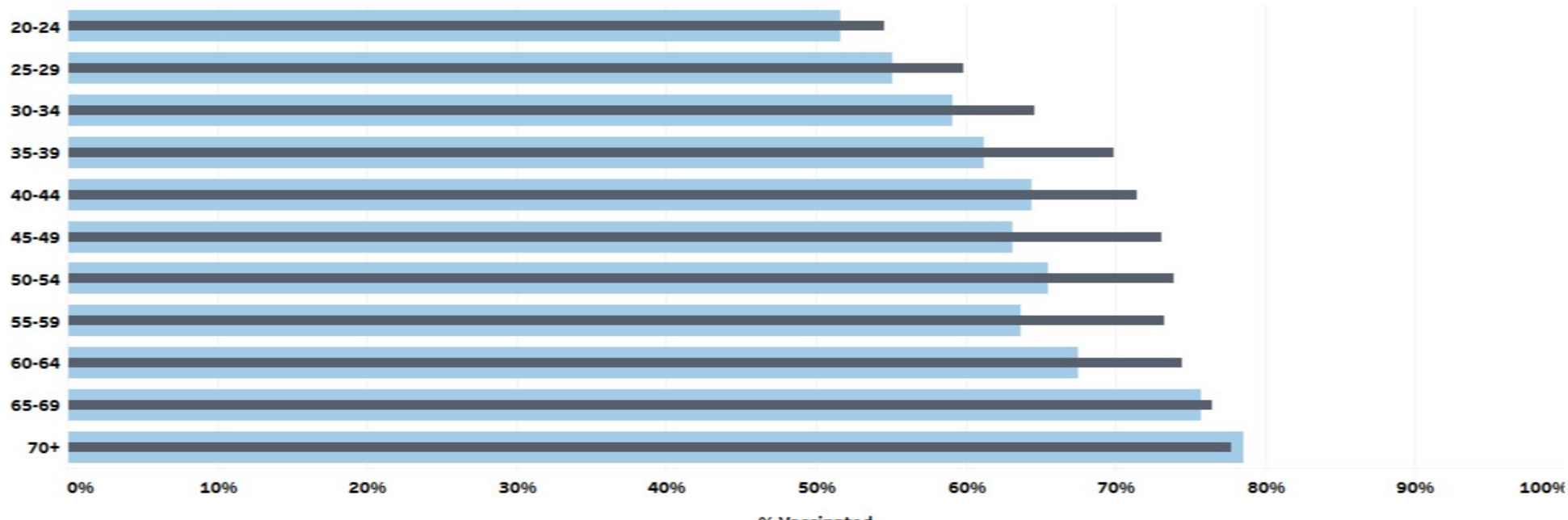
The graph below compares the licensed health care worker (HCW) vaccination initiation rate (1+ dose) to the total Oregon adult population rate. Overall, HCWs have a higher vaccination rate compared to the general population.



Increasing Vaccination Rates by Age

While licensed HCWs were eligible for vaccine early in the pandemic, the general population was eligible on a rolling basis according to age and other factors. The graph below compares licensed HCW vaccination rates to the general population of Oregon by age group.

Immunization rates increase with age. Across age groups, HCW rates are higher than the general population.

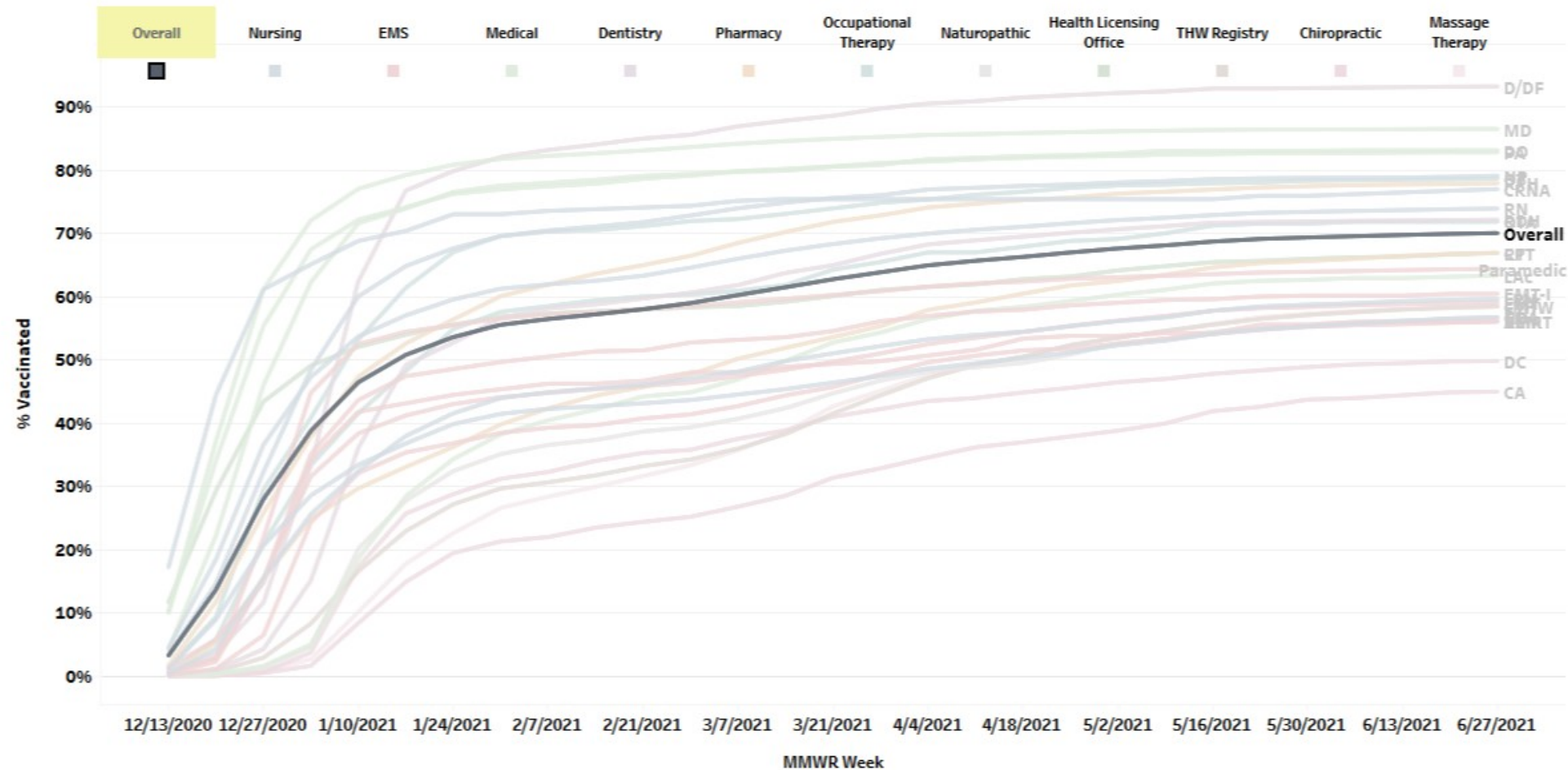


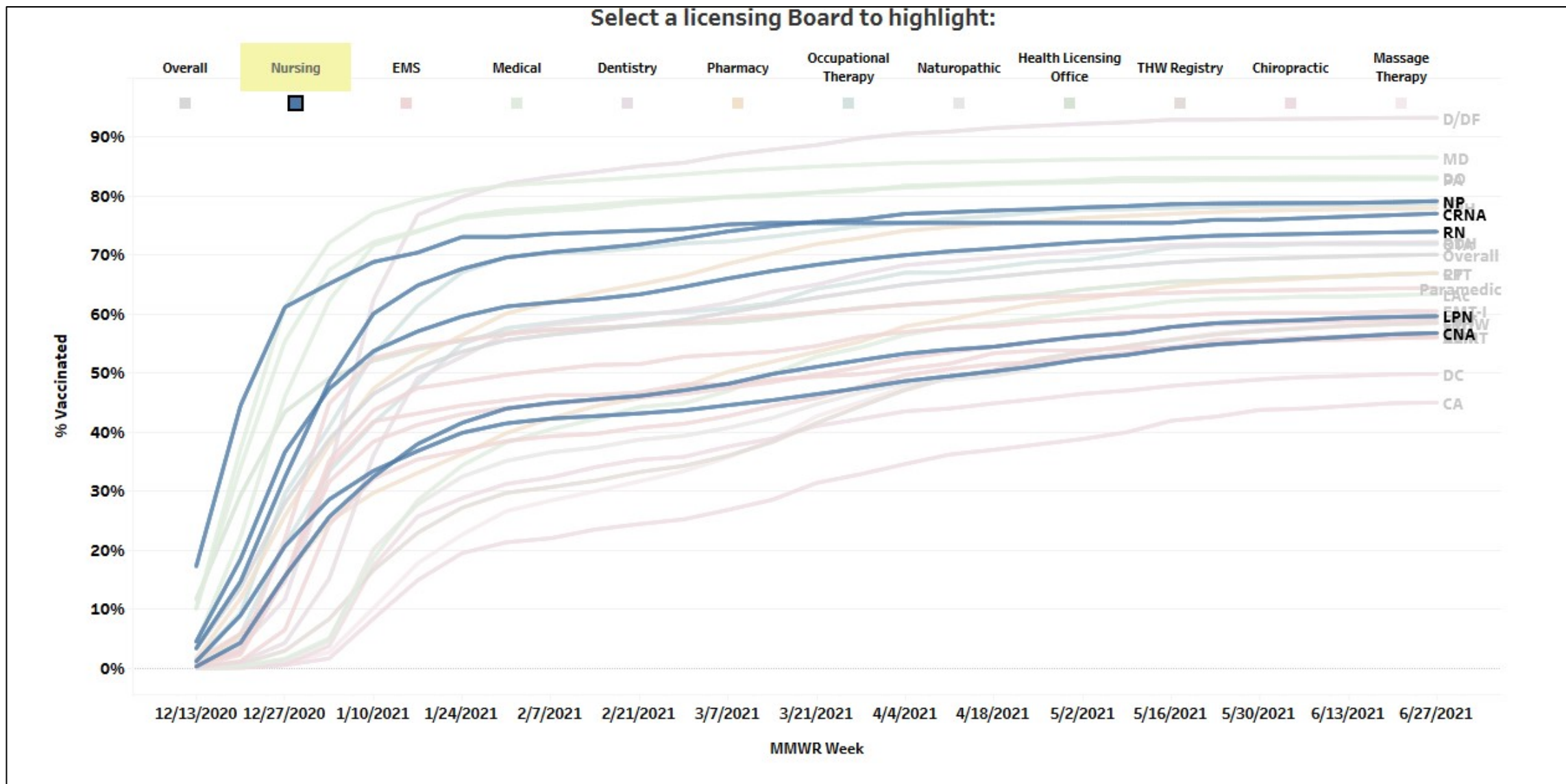
Ongoing Progress in Vaccine Uptake among Health Care Workers (HCW)

Many HCW were immunized in the first wave of vaccine availability. COVID vaccine initiation is still ongoing among licensed HCWs across all categories.

Despite all health care workers becoming eligible early in the vaccination effort, some license groups initiated vaccination later than others and this may reflect barriers in access or knowledge of vaccine eligibility.

Select a licensing Board to highlight:

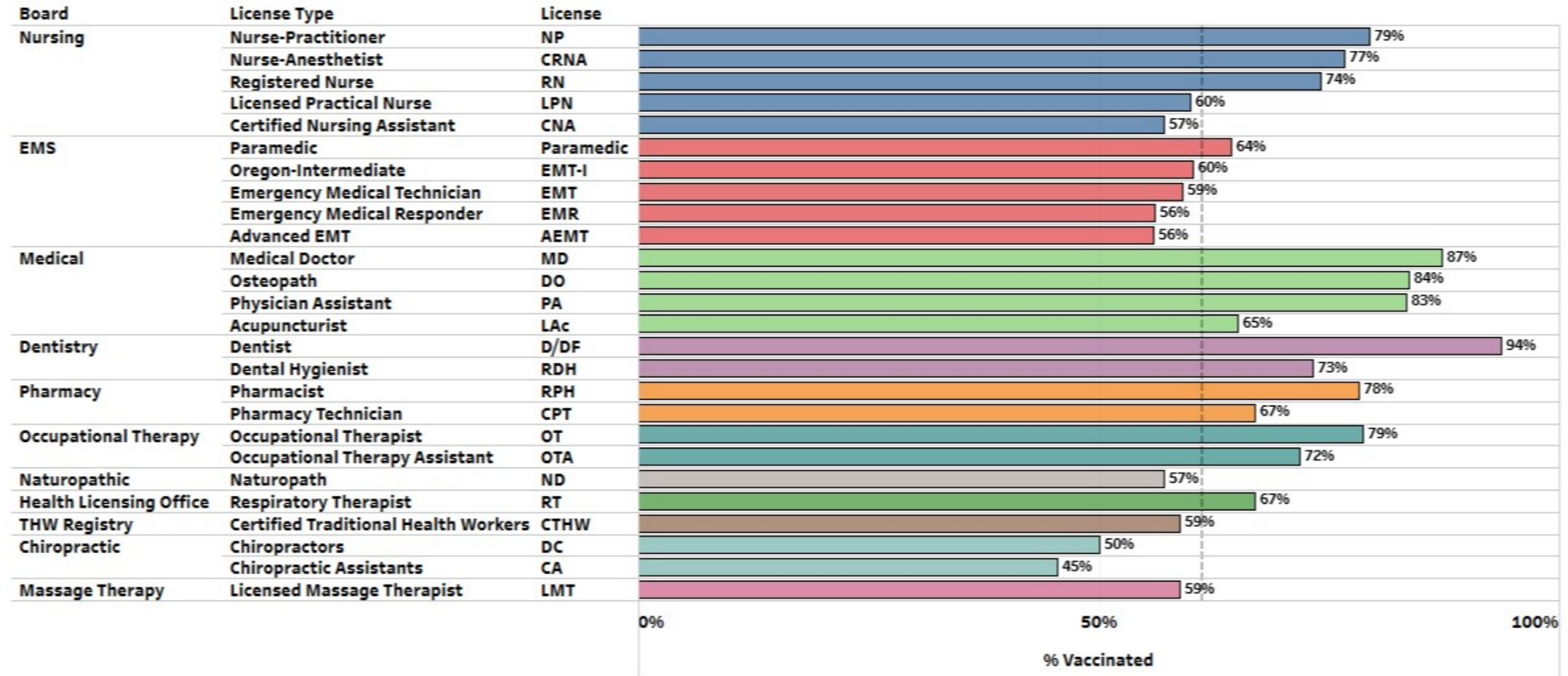




Differences Exist in Vaccination Rates among Licensee Types

*Reference Line: General Population Vaccination Rate (18 to 65)

Immunization rates vary by license type. One variable that may impact vaccination rates is the varying age among license type holders. Hover your mouse over the bars to view a graph of average age of license type and vaccination rate.



- Are low EMS rates also a guide to firefighter COVID risk?

NEWS

9 Bootleg firefighters test positive for coronavirus

Virginia Barreda Salem Statesman Journal

Published 4:02 p.m. PT Jul. 22, 2021 | Updated 1:00 p.m. PT Jul. 23, 2021

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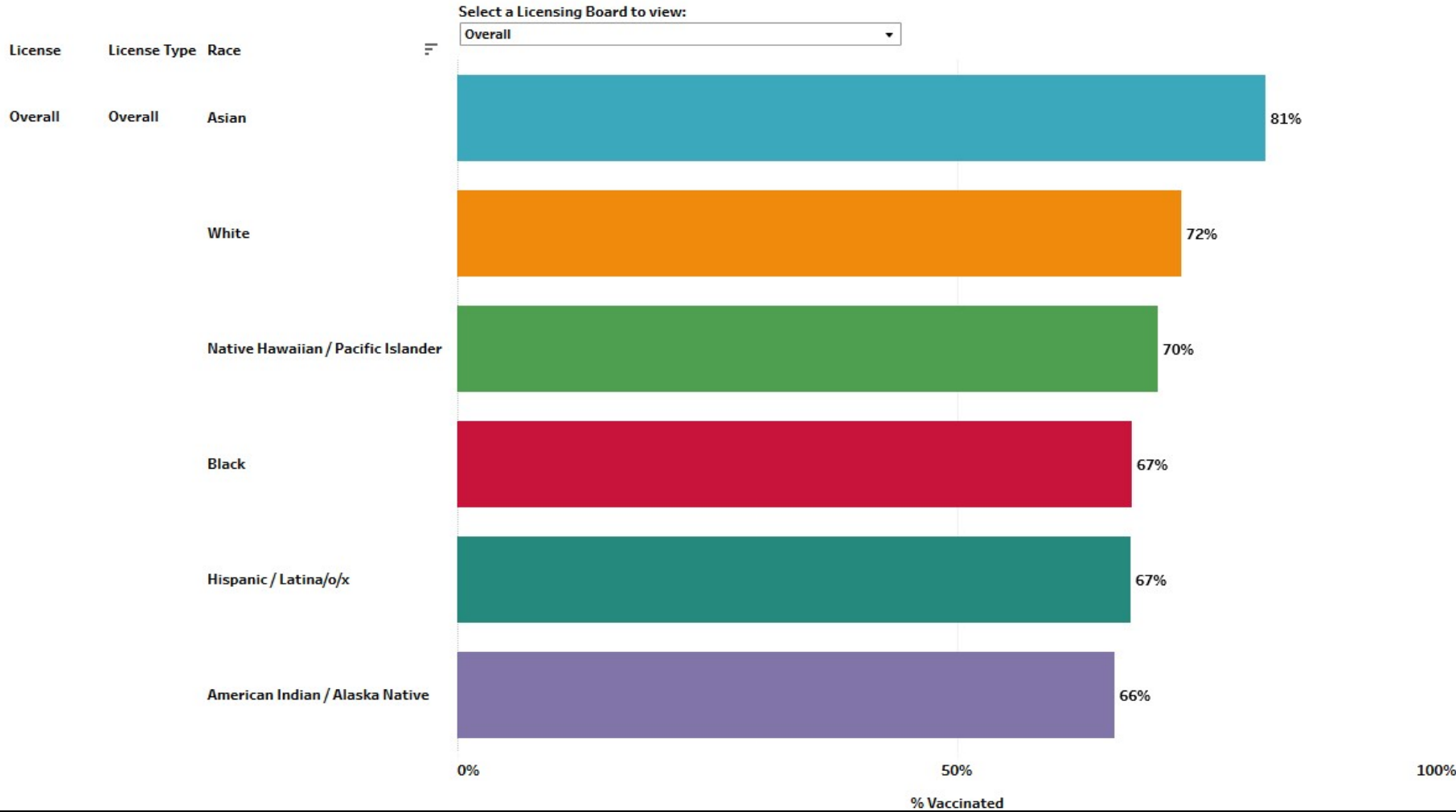


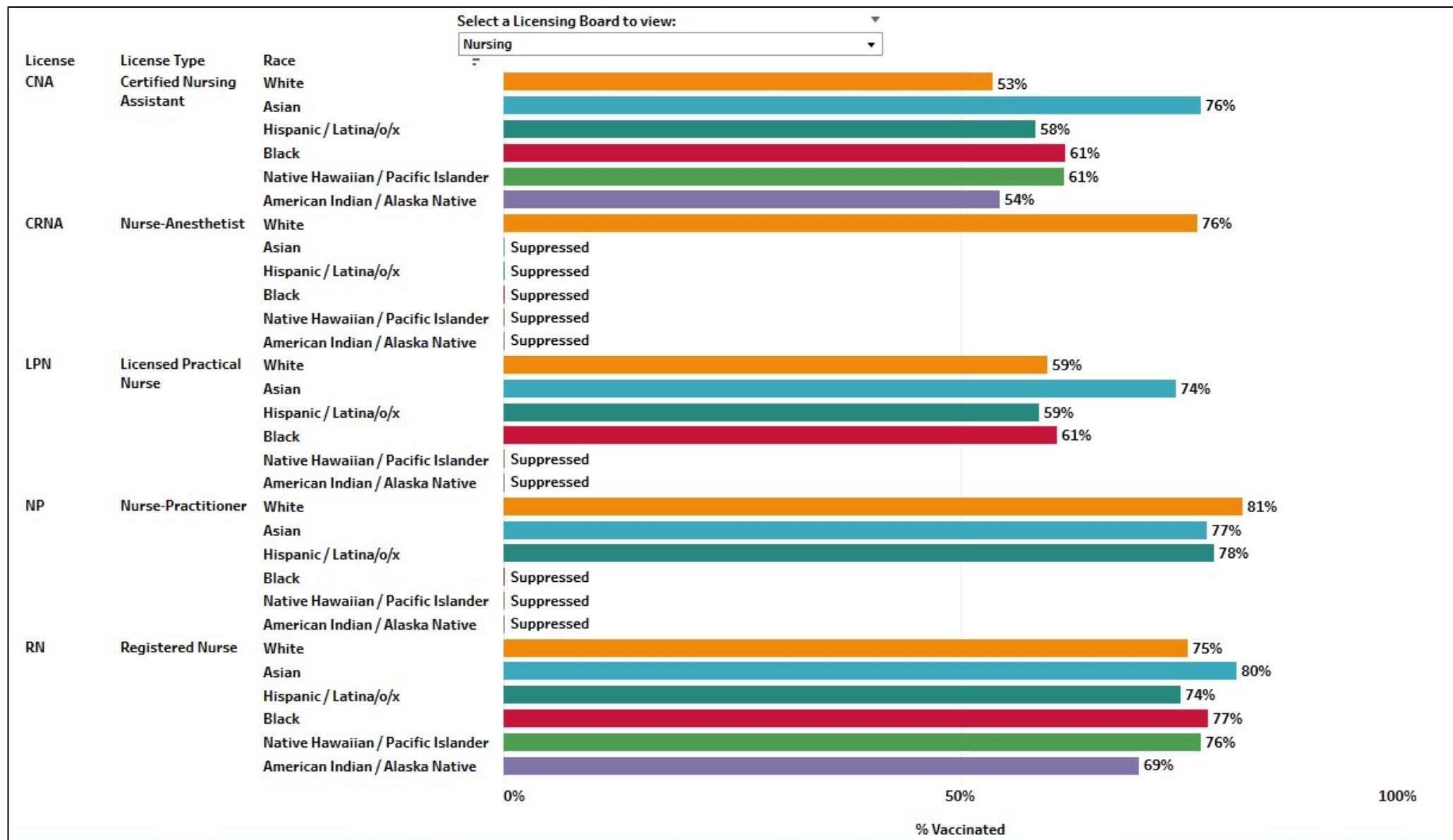
VIDEO: Time-lapse shows smoke over Bootleg Fire

A time-lapse video shows smoke rising over the Bootleg Fire burning in southern Oregon. Oregon Office of the State Fire Marshal, Salem Statesman Journal

Race and Ethnicity Impact on Health Care Workers Vaccine Uptake

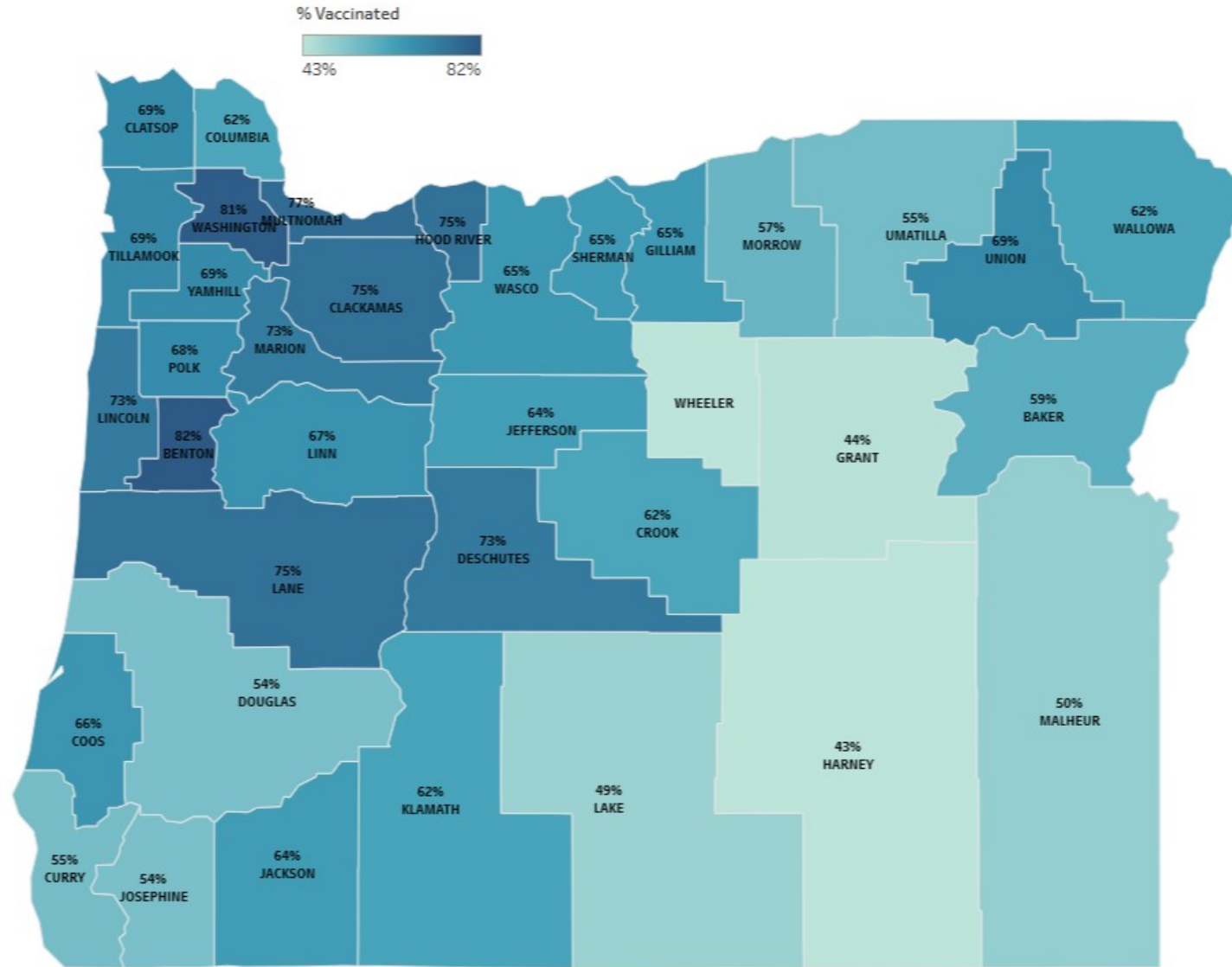
The Health Care Workforce Reporting Program (HWRP) surveys licensees for self-reported race and ethnicity. Licensees are grouped by rarest racial and ethnic identity††. The order of racial and ethnic groups from rarest to most common for the vaccination data is: Native Hawaiian and Pacific Islander, Black or African American, American Indian and Alaska Native, Hispanic or Latino/a/x, Asian, then White. Unknown and Other race is not shown. Rarest race methodology does not have a multiracial group. Vaccination rates for racial and ethnic groups with fewer than 50 individuals is suppressed. Use the drop-down menu to change licensing board.





**Vaccination Rate by
County**

BENTON	82%
WASHINGTON	81%
MULTNOMAH	77%
HOOD RIVER	75%
CLACKAMAS	75%
LANE	75%
DESCHUTES	73%
LINCOLN	73%
MARION	73%
TILLAMOOK	69%
YAMHILL	69%
UNION	69%
CLATSOP	69%
POLK	68%
LINN	67%
COOS	66%
WASCO	65%
GILLIAM	65%
SHERMAN	65%
JACKSON	64%
JEFFERSON	64%
KLAMATH	62%
WALLOWA	62%
CROOK	62%
COLUMBIA	62%
BAKER	59%
MORROW	57%
UMATILLA	55%
CURRY	55%
DOUGLAS	54%
JOSEPHINE	54%
MALHEUR	50%
LAKE	49%
GRANT	44%
HARNEY	43%
WHEELER	43%



General Observations

- HCW likelihood of COVID-19 vaccination varies with several factors:
 - Age (+)
 - ‘Height’ of License (+)
 - Rural location (-)
- License groups with lower license ‘height’, or CAM providers, had slower initial uptake, and are still initiating.
- Variation in HCW vaccine uptake across counties looks like general population uptake.
- Except for the highest license types, HCW reflect their communities.

Next Steps

- Dashboard is updated monthly through the summer;
- Additional HCW groups are being added for August (physical therapists, & behavioral health workers)

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