

# Multiracial Misclassification

Enrichment and Erasure of American Indian/Alaska Native Representation in Washington State COVID-19 Reported Case Data

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1. Washington State Department of Health



2. Northwest Tribal Epidemiology Center

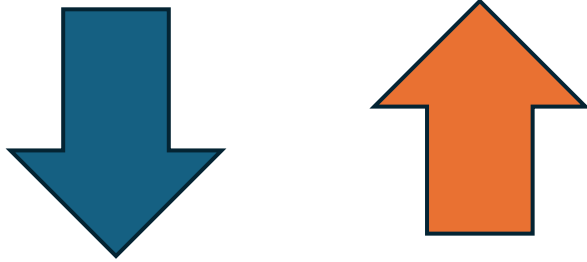


The authors of this project have no conflicts of interest to disclose.

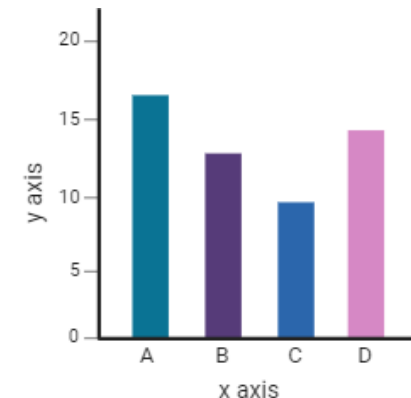
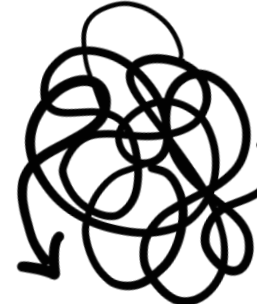
Slides are available here:



# Story #1

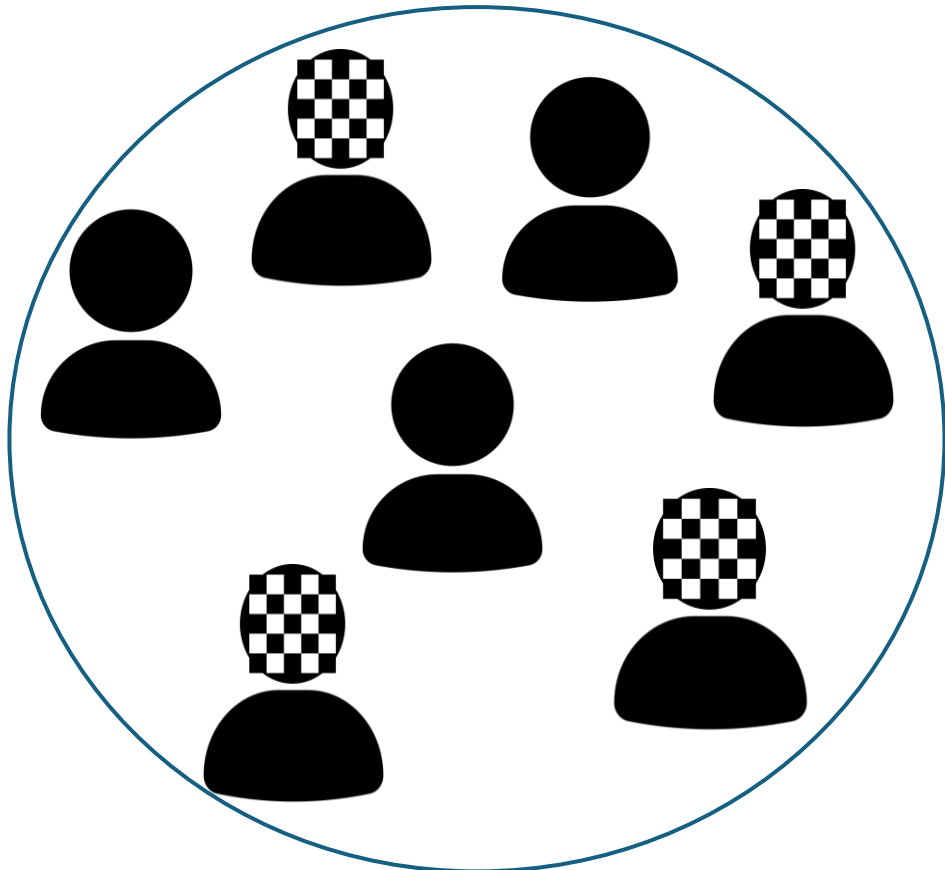


# Story #2





# Story #1: COVID-19 Case Linkage Process

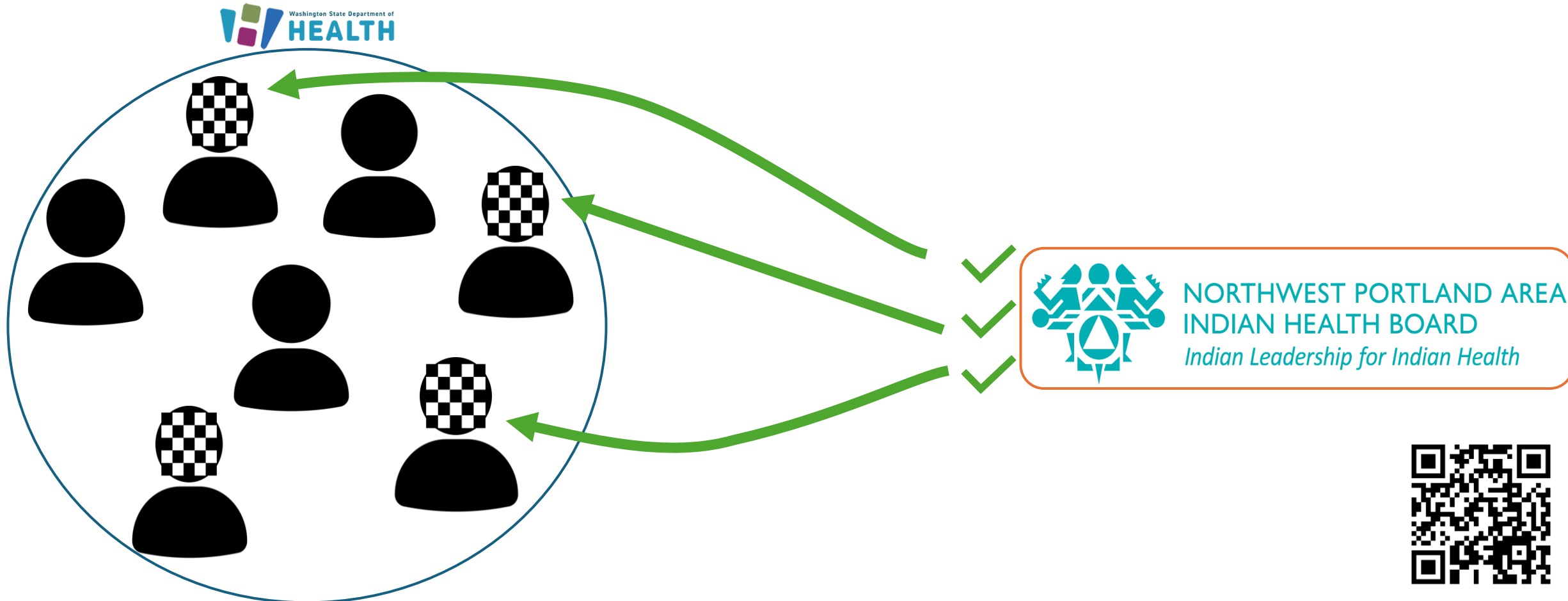


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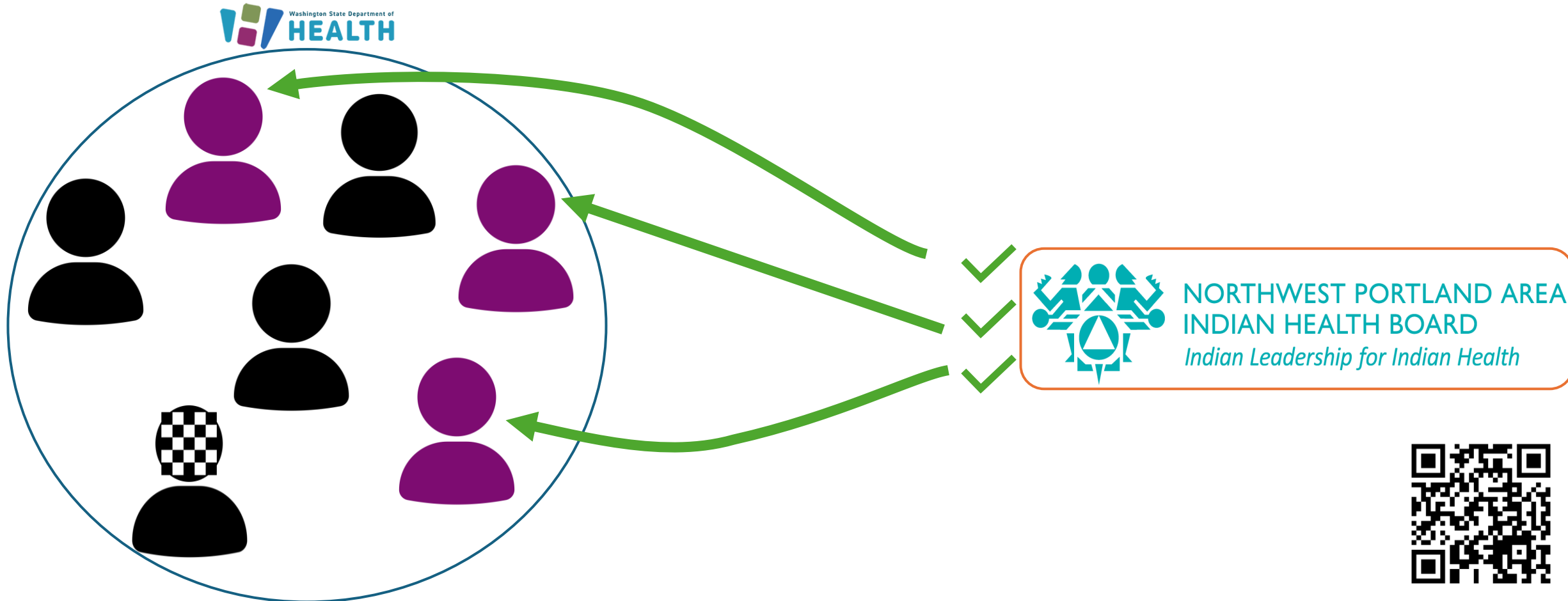
# COVID-19 Case Linkage Process

- Probabilistic matching using Match\*Pro
- **First Name, Last Name, DOB** weighted heavier than other fields in match process



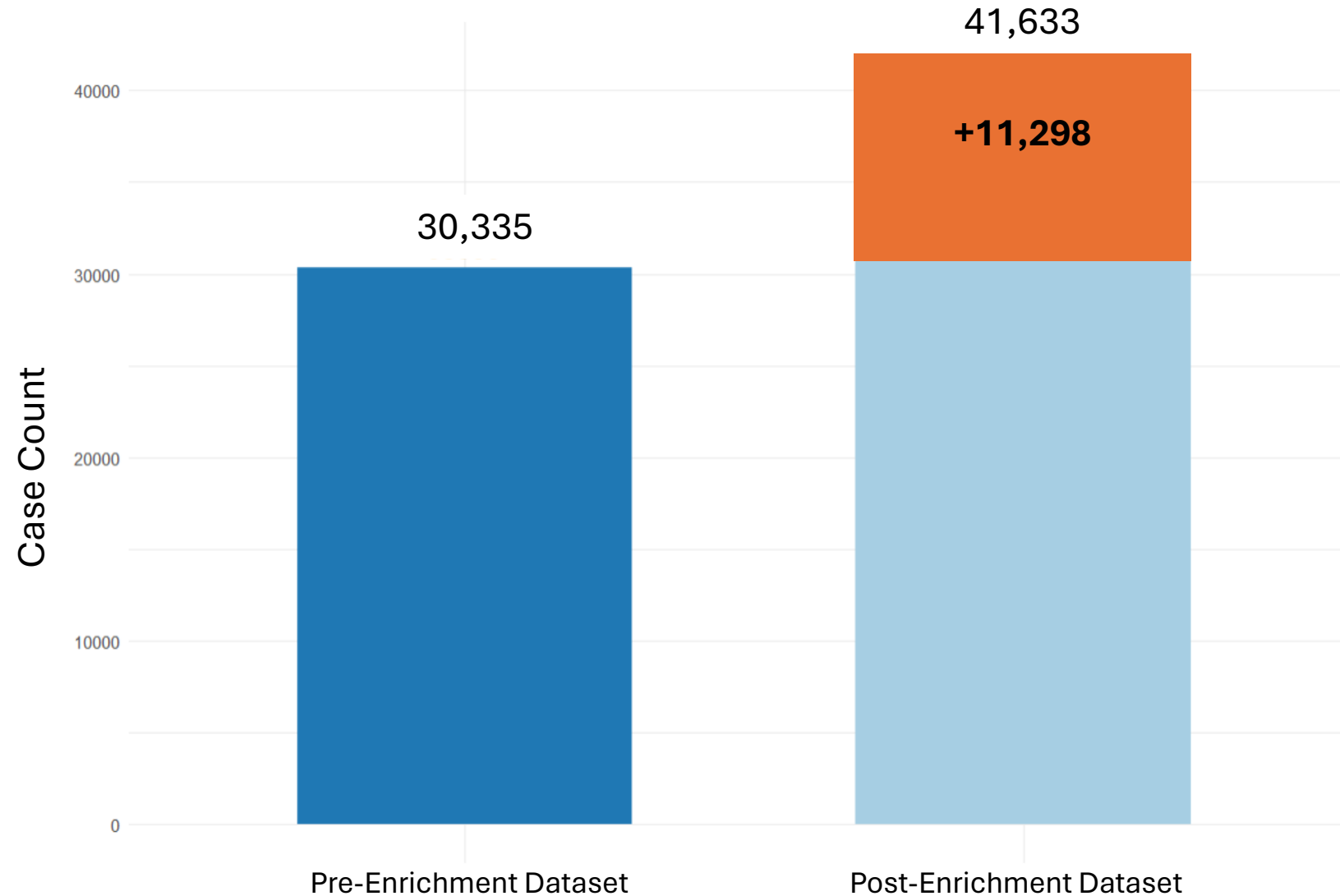
# COVID-19 Case Linkage Process

- Cases between March 1<sup>st</sup>, 2020 – June 30<sup>th</sup>, 2023
- Probabilistic matching (Match\*Pro)
- Cases newly identified as AI/AN = matched in Northwest Tribal Registry



# “American Indian/Alaska Native” Race Category Added to Cases Post-Linkage

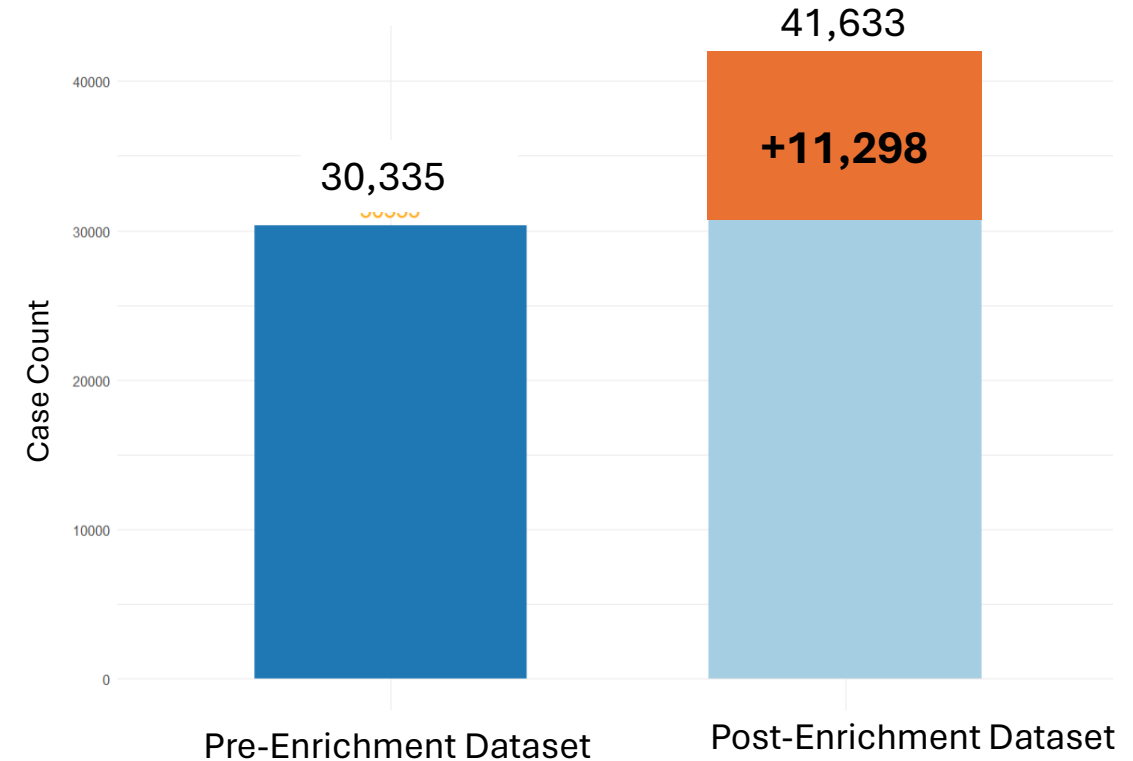
- 30,335 AI/AN cases pre-linkage
- 41,633 AI/AN cases post-linkage
- **11,298 cases newly identified as AI/AN**



**37% increase in identifying cases as American Indian/Alaska Native pre vs post linkage**

# Story #1 Conclusion

- Linkage successfully enriched 37% increase in AI/AN representation in WA DOH COVID-19 datasets
- Replicable model for partnership between Tribal epidemiologists and state epidemiologists
  - Can be applied to other reportable illnesses

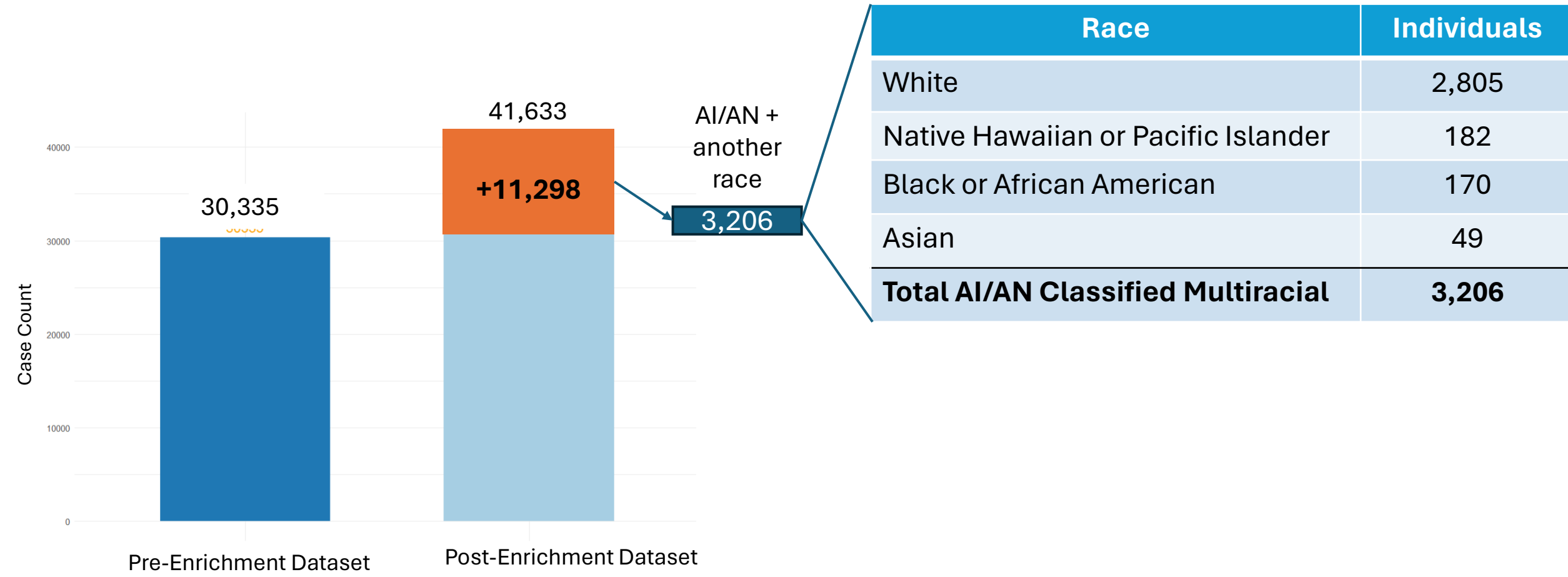




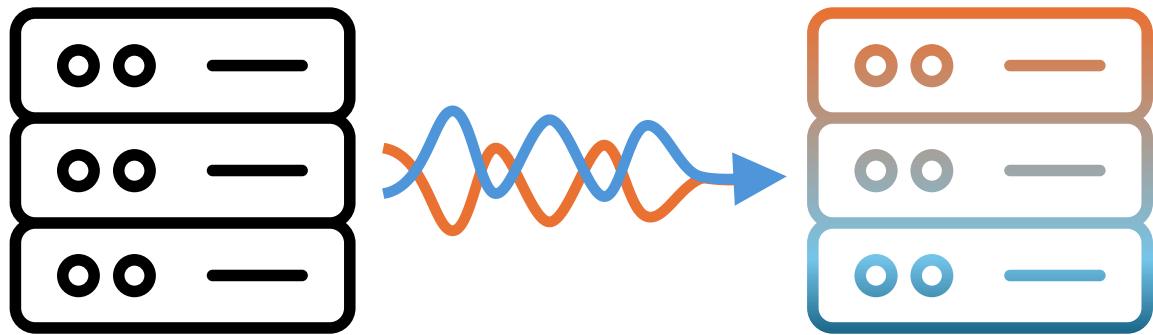


## STORY #2: LOOKING FURTHER DOWNSTREAM

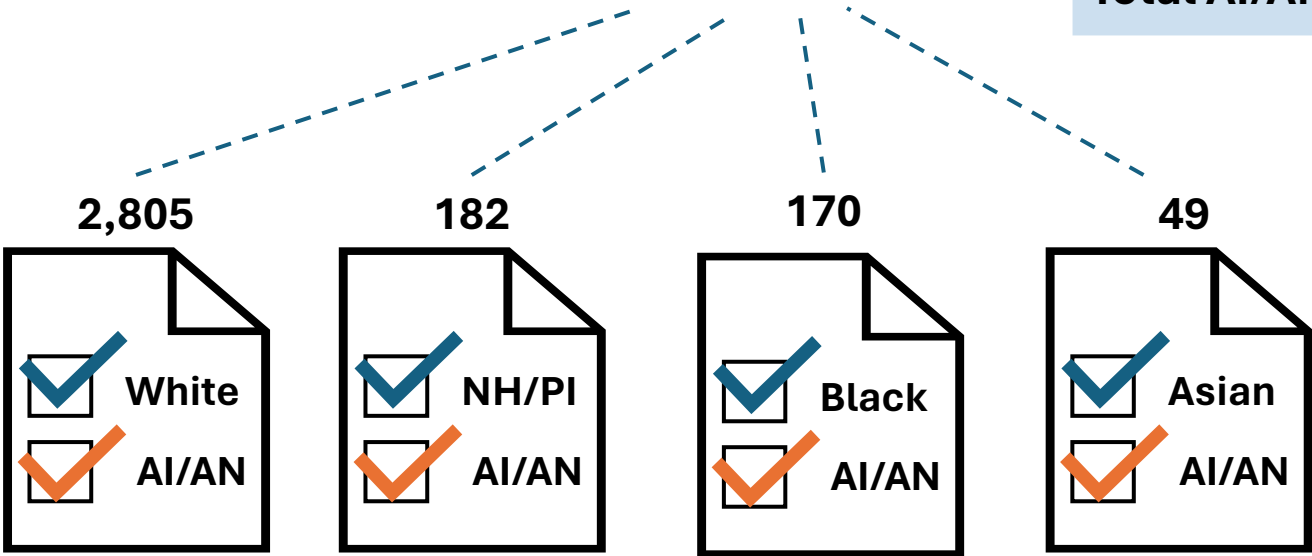
# Newly Identified AI/AN Multiracial Race Categories



# Newly Identified AI/AN Multiracial Race Categories



Race	Individuals
White	2,805
Native Hawaiian or Pacific Islander	182
Black or African American	170
Asian	49
<b>Total AI/AN Classified Multiracial</b>	<b>3,206</b>



COVID-19

Influenza

RSV

Disease Trends

Season Totals

Health Disparities

DATA AS OF 04/15/2024 11:59PM PT

[Click here for dashboard user tips](#)

**Typically, the respiratory disease season starts in October and ends in September the following year.** This chart shows the current respiratory disease season's number of positive COVID-19 test results (cases) submitted by certified laboratories for every 100,000 Washington residents by race or ethnicity (colored lines). Each colored line represents a different race or ethnicity and shows if the number of positive tests is increasing, decreasing, or staying the same in that race compared to past weeks. Positive test results tell us about disease spread. [Learn More](#)

Hospitalizations

Emergency Visits

Positive Clinical Tests

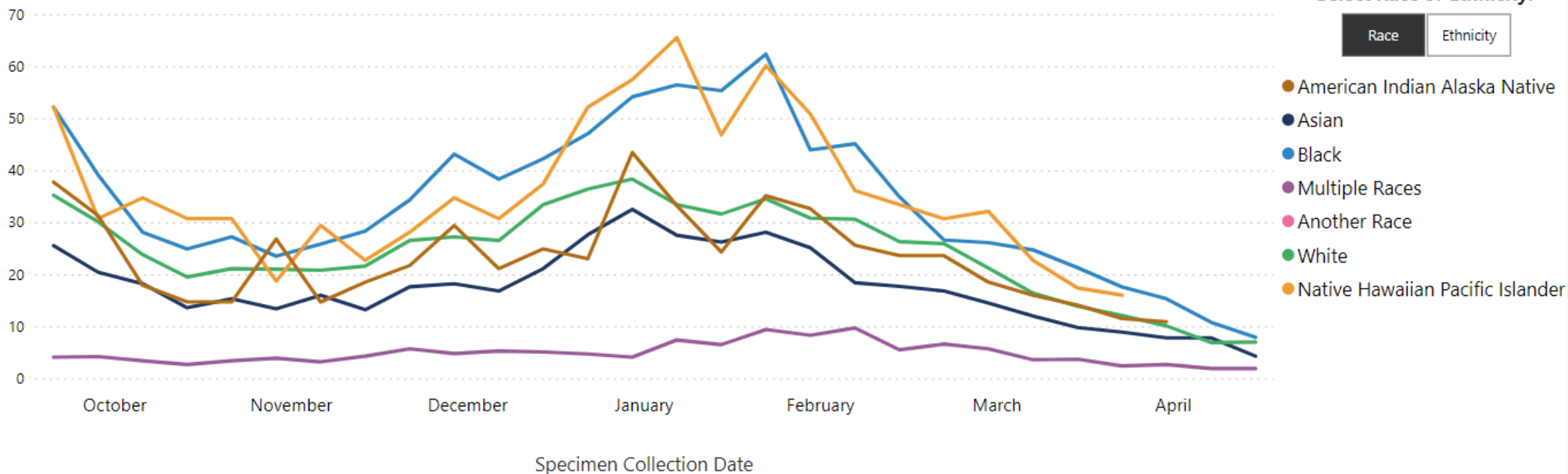
Age

Sex

Race and Ethnicity

\*\*\*Click on the legend on the right to select a trend line. Gaps in trend lines represent data that are not reported to protect privacy.\*\*\*

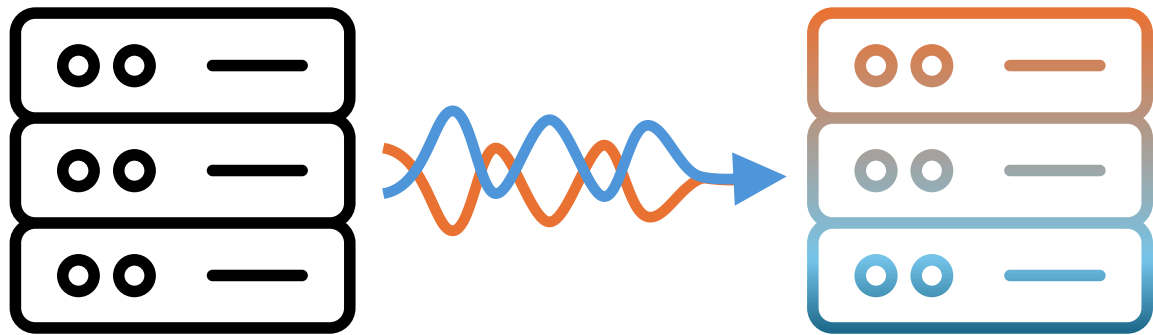
Trend: Rate of COVID-19 Positive Clinical Tests (Cases) by Race for Statewide: 2023-2024



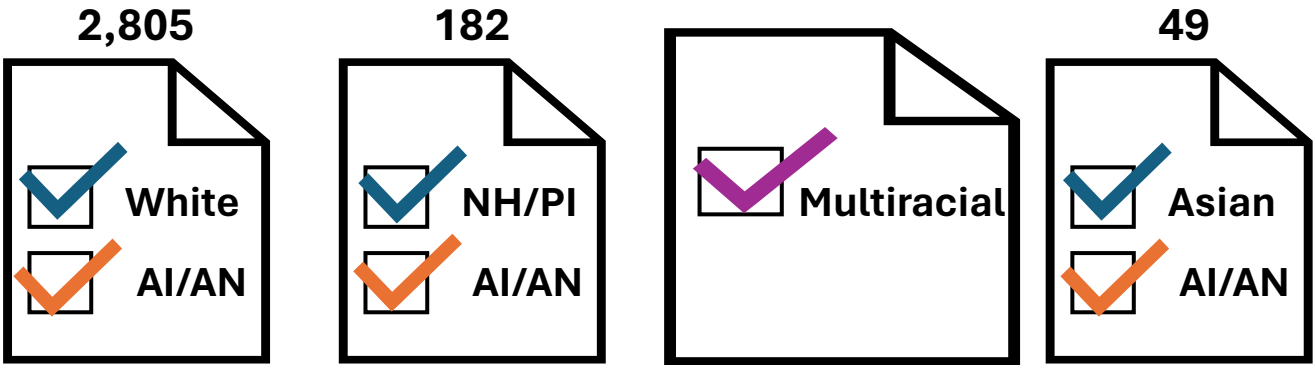
160 of 683 reported clinical tests from the most recent complete week do not have an assigned race or ethnicity.

Download

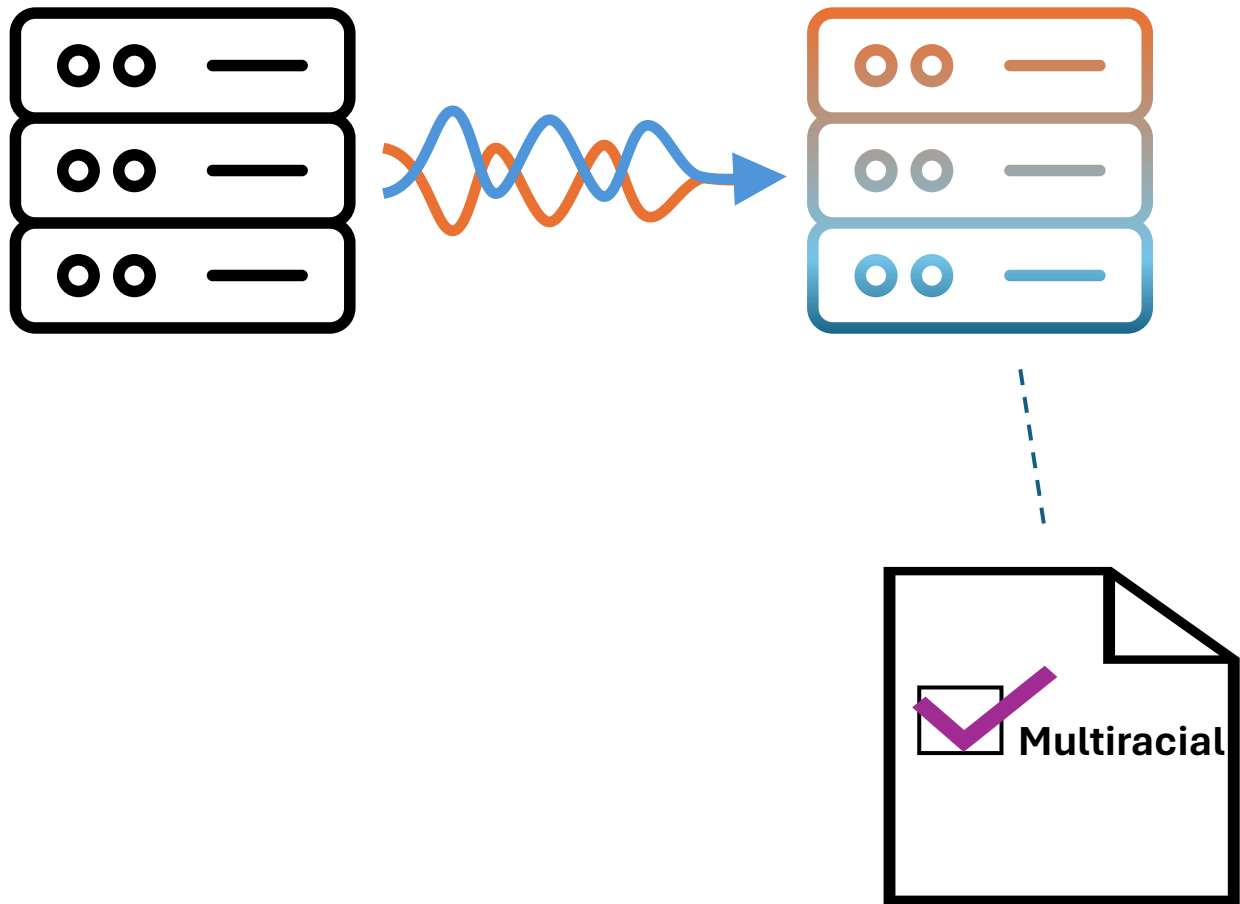
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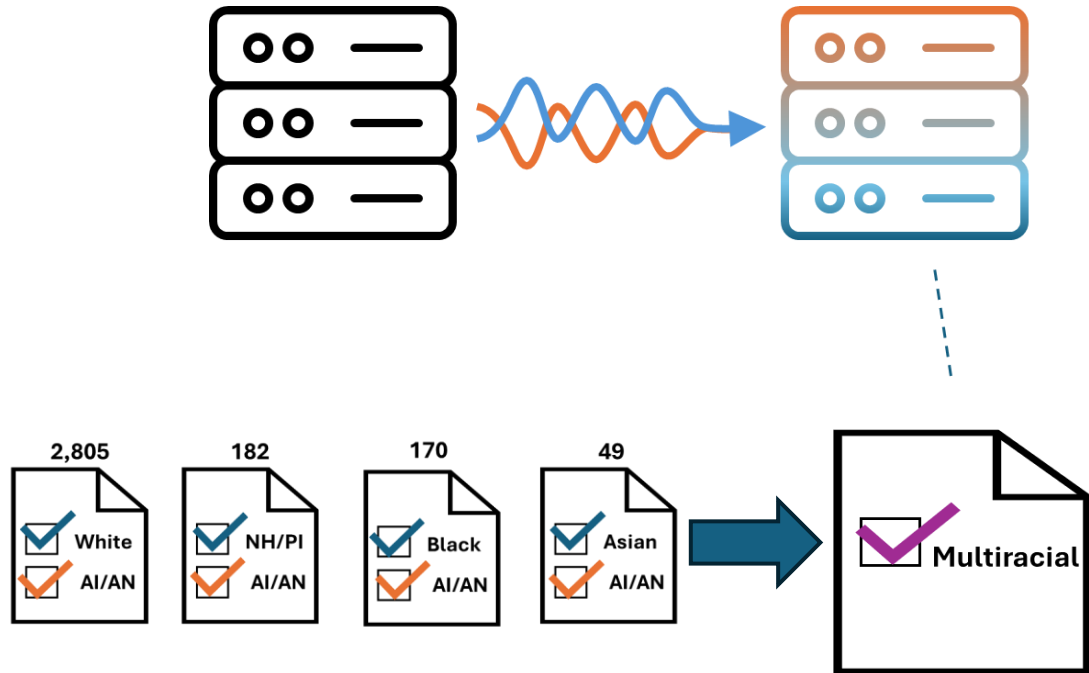
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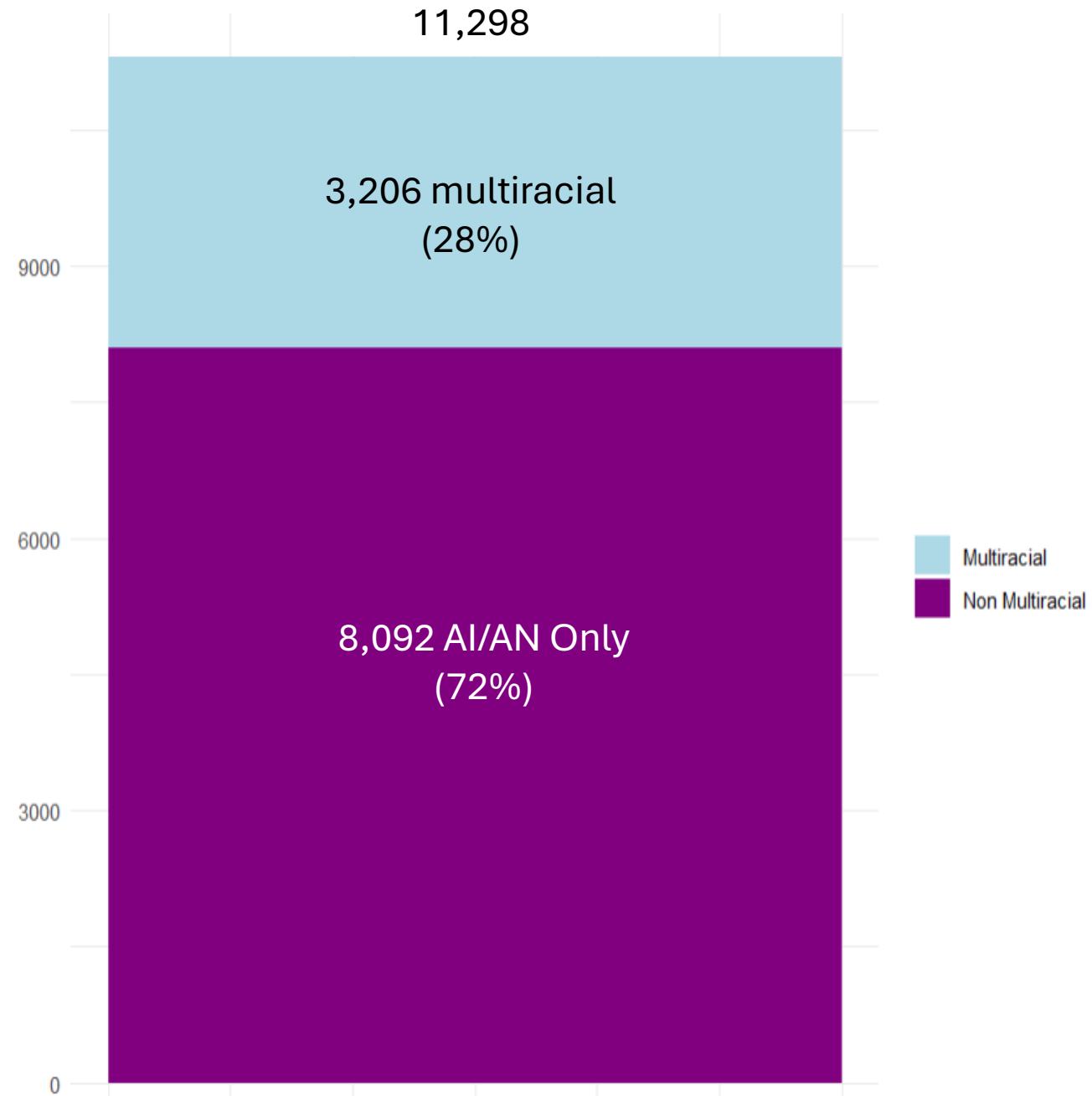
Race	Individuals
Newly Identified Multiracial	+3,206



# Cases Identified as AI/AN Through Linkage Now Considered Only “Multiracial”

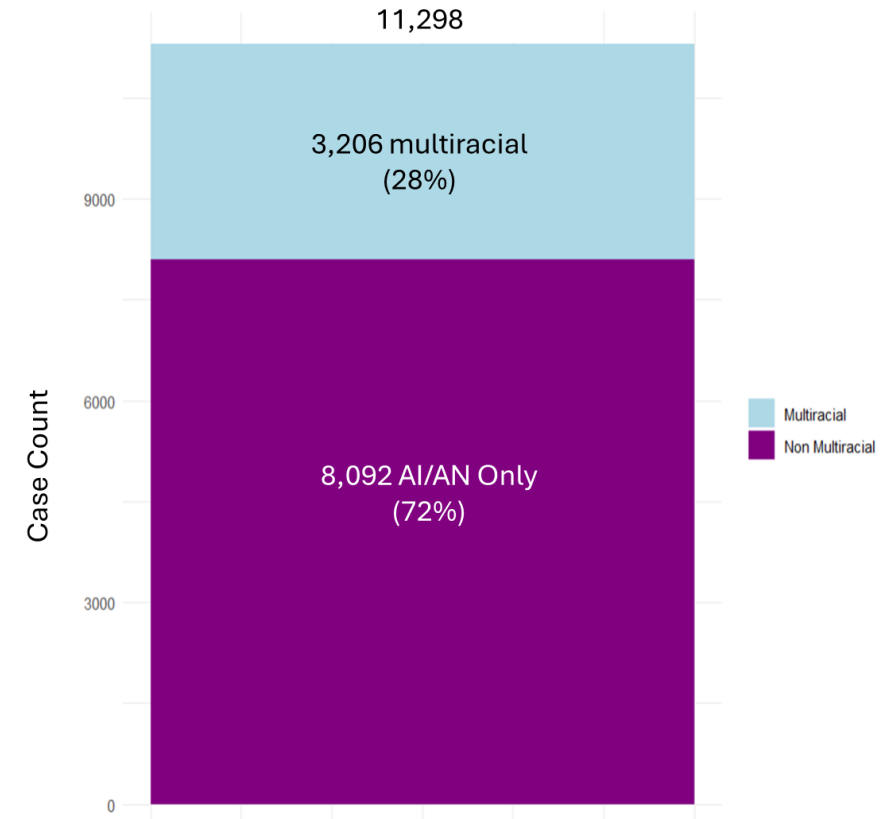


Case Count



# Story #2 Conclusion

- Enrichment process limited by 28% AI/AN erasure downstream due to “Multiple Races” summary category
- While statistics on individuals identifying as more than 1 race are helpful, careful database design and presentation is necessary to avoid erasure of underrepresented groups

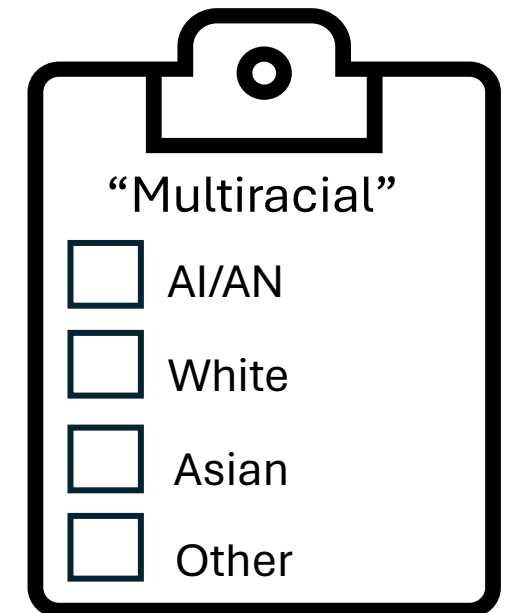
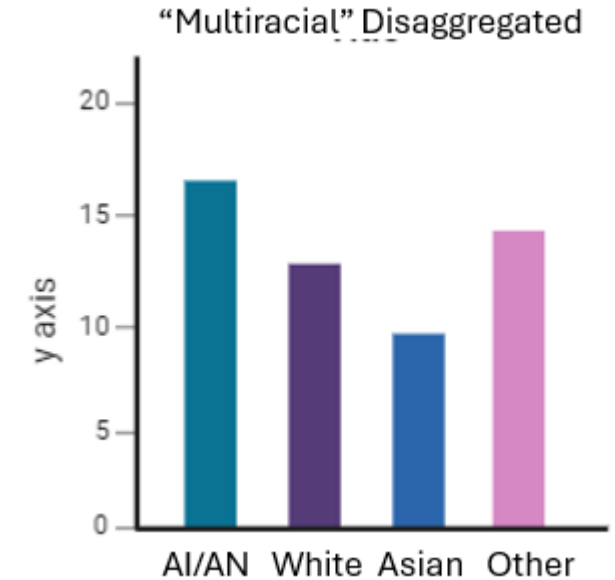


# Limitations

- Northwest Tribal Registry does not include information on all AI/AN people in Washington
- We cannot know exactly how many people went from Race Unknown to being identified as American Indian or Alaska Native due to this linkage specifically
- Multiracial does not always simply mean “I identify with more than one racial category.” ([pewresearch.org](https://www.pewresearch.org))
  - How much or how little we identify with a category is important
- A historically marginalized group of people may continue to be underrepresented in our data

# What are we supposed to do?

- Critical about when/how we use summary categories
  - AI/AN is already a summary category
- Represent data in breakdowns to avoid duplication
  - AOIC, “Alone or in combination with” categories
- Create data linkages and partnerships between Tribal and state epidemiologists



# ACKNOWLEDGEMENTS

Northwest Portland Area Indian  
Health Board

Northwest Tribal Epidemiology  
Center

WA DOH Office of Health and  
Science

WA DOH Data Integration and  
Quality Assurance (DIQA) Team

Washington State Local Health  
Jurisdictions

## NPAIHB Member Tribes

Chehalis Tribe

Quinault Indian Nation

Samish Indian Nation

Sauk-Suiattle Tribe

Shoalwater Bay Tribe

Skokomish Tribe

Snoqualmie Tribe

Spokane Tribe

Squaxin Island Tribe

Stillaguamish Tribe

Suquamish Tribe

Swinomish Tribe

Tulalip Tribe

Upper Skagit Tribe

Yakama Indian Nation

Colville Tribes

Cowlitz Tribes

Hoh Tribe

Jamestown S’Klallam  
Tribe

Kalispel Tribe

Lower Elwha Klallam Tribe

Lummi Nation

Makah Tribe

Muckleshoot Tribe

Nisqually Tribe

Nooksack Tribe

Port Gamble S’Klallam  
Tribe

Puyallup Tribe

Quileute Tribe





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For additional questions about the linkage process from a Tribal epidemiology perspective, please contact:

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