

# Racial Misclassification of Indigenous Children in Research



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## BACKGROUND

### Racial Aggregation

- Discrepancies in racial aggregation and reporting are data quality issues that can affect access to critical resources for over 8 million American Indians/Alaska Natives (AI/AN) in the US.<sup>1,2,3,4</sup>
- Federally funded research built upon the biomedical-epidemiologic model requires researchers to utilize evidence-based assessments of population health status.<sup>3</sup>

### Youth Risk Behavior Surveillance System (YRBSS)

- The YRBSS consists of a biannual survey conducted by the Centers for Disease Control and Prevention to track health-related behaviors and demographics of students in grades 9-12.<sup>5</sup>

## OBJECTIVE

To identify how race and ethnicity were reclassified with survey variables for children self-selecting AI/AN using the 2021 Youth Risk Behavior Surveillance System (YRBSS).

## METHODS

- We conducted a cross-sectional analysis of the 2021 YRBSS.
- Data were extracted from the self-reported race variable which allows multiple selection options as well as from the prompt “Are you Hispanic or Latino?”
- We then calculated and compared the number of adolescents who self-reported AI/AN to the racial category they were reclassified into via the raceeth variable.

## RESULTS

A combined 816 individuals self-reported as either AI/AN alone (145, 17.77%), AI/AN alone with Hispanic or Latino background (n=246, 30.15%), or AI/AN in combination with one or more other races (n=425, 52.08%). Only 145 adolescents were classified as being AI/AN in the calculated raceeth variable.

Table 1. Racial reporting among individuals reporting as AI/AN

Race grouping	Hispanic no. (%)	Non-Hispanic no. (%)	Unsure/Missing no. (%)	Total no. (%)
RaceEth variable from YRBSS				
AI/AN only	0, (0)	145, (100)*	0, (0)	145, (100)
Self-Selected race from YRBSS				
AI/AN only	246, (30.15)	145, (17.77)*	12, (1.47)	403, (49.39)
AI/AN, White	40, (4.9)	178, (21.81)	0, (0)	218, (26.72)
AI/AN, NH/PI	4, (0.49)	0, (0)	0, (0)	4, (0.49)
AI/AN, NH/PI, White	4, (0.49)	2, (0.25)	0, (0)	6, (0.74)
AI/AN, Black or African American	22, (2.7)	64, (7.84)	2, (0.25)	88, (10.78)
AI/AN, Black or African American, White	5, (0.61)	32, (3.92)	0, (0)	37, (4.53)
AI/AN, Black or African American, NH/PI	1, (0.12)	1, (0.12)	0, (0)	2, (0.25)
AI/AN, Black or African American, NH/PI, White	1, (0.12)	1, (0.12)	0, (0)	2, (0.25)
AI/AN, Asian	6, (0.74)	4, (0.49)	0, (0)	10, (1.23)
AI/AN, Asian, White	0, (0)	9, (1.1)	0, (0)	9, (1.1)
AI/AN, Asian, NH/PI	1, (0.12)	2, (0.25)	0, (0)	3, (0.37)
AI/AN, Asian, NH/PI, White	1, (0.12)	2, (0.25)	0, (0)	3, (0.37)
AI/AN, Asian, Black or African American	2, (0.25)	1, (0.12)	0, (0)	3, (0.37)
AI/AN, Asian, Black or African American, White	1, (0.12)	2, (0.25)	2, (0.25)	5, (0.61)
AI/AN, Asian, Black or African American, NH/PI	1, (0.12)	0, (0)	0, (0)	1, (0.12)
AI/AN, Asian, Black or African American, NH/PI, White	10, (1.23)	10, (1.23)	1, (0.12)	21, (2.57)
All race combinations including other races not listed	0, (0)	1, (0.12)	0, (0)	1, (0.12)
Total	345, (42.28)	454, (55.64)	17, (2.08)	816, (100)

\*Only group included in aggregate raceeth variable as AI/AN

## CONCLUSION

- Misclassification, non-collection, or the use of categories such as “other” or “multi-race” without allowing for disaggregation can misrepresent disease burden, morbidity, and mortality.<sup>6</sup>
- Other national datasets, such as the National Survey of Children’s Health and the adult Behavioral Risk Factor Surveillance System do not provide self-report race/ethnicity while using similar aggregation processes.

## FUTURE RECOMMENDATIONS

- Future recommendations include the inclusion of AI/AN leadership in research processes,<sup>1,2</sup> partnerships to support data sovereignty,<sup>7</sup> disaggregating data to adequately capture race/ethnicity,<sup>6</sup> and changes to Federal data standards.<sup>7</sup>
- Finally, researchers should consider capturing data at the Tribal Nation level to fully represent the unique experiences of individual nations.

## REFERENCES

- Friedman J, Hansen H, Gone JP. Deaths of despair and Indigenous data genocide. *Lancet*. 2023;401(10379):874-876.
- Kalweit A, Clark M, Ischomer-Aazami J. Determinants of Racial Misclassification in COVID-19 Mortality Data: The Role of Funeral Directors and Social Contact. *Am Indian Cult Res J*. 2021;44(3):15-36.
- Fazouas EA, Strickland CJ, Palacios JF, Solomon TGA. Blood politics, ethnic identity, and racial misclassification among American Indians and Alaska Natives. *J Environ Public Health*. 2014;2014:321604. U.S. Census Bureau. American Indian and Alaska Native alone or in combination with one or more other races. Published online September 15, 2022. Accessed August 15, 2023.
- YRBSS overview. Published May 2, 2023. Centers for Disease Control and Prevention.
- Data genocide of American Indians and Alaska natives in COVID-19 data. *Urban Indian Health Institute*. Published February 19, 2021.
- Sanchez GR, Hoyer KR, Maxam R. Why the federal government needs to change how it collects data on Native Americans. *Brookings*. Published March 30, 2023. Accessed August 15, 2023.