

Impact of Race/Ethnicity Reporting Methods: Health Disparities Among American Indians/Alaska Natives

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INTRODUCTION

New Mexico has the 5th largest American Indian/Alaska Native (AI/AN) population in the country. This includes citizens of the 24 sovereign Tribes, Pueblos, and Nations in NM. While this report discusses AI/AN as a race/ethnicity category, these Tribal nations have the inherent right to govern themselves and political relationships with the U.S. and NM State governments not derived from race or ethnicity.¹

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In 2024, the Office of Management and Budget of the federal government revised Statistical Policy Directive No. 15 (SPD15).² This Directive guides how race and ethnicity data are collected by federal agencies and on the Census. Two major changes that impact AI/AN populations are: 1. Merging race and ethnicity questions from two separate questions into one question and 2. Recommending a write-in field be provided for detailed responses.²

To reduce racial misclassification and under-representation of AI/AN in public health data, Tribal health organizations advocate reporting AI/AN data as AI/AN alone or in combination with other races and ethnicities (AI/AN a/c).^{3,4} In consideration of Tribal advocacy efforts and the SPD15 revision, the objective of this analysis is to assess if and how race/ethnicity reporting approaches impact health disparity measurements in NM.

What is already known about this topic?

There are multiple methods for analyzing and reporting public health data by race and ethnicity. Tribal health organizations advocate reporting American Indian and Alaska Native (AI/AN) data as AI/AN alone or in combination (AI/AN a/c) with other races and ethnicities.

What is added by this report?

Investigated if different methods of race and ethnicity reporting affected health disparities observed for AI/AN adults. Found the AI/AN a/c categorization masked variations in social drivers of health and health behaviors.

What are the implications for public health practice?

Methods of race/ethnicity categorization can meaningfully impact results and conclusions, so public health data analysts should work with local communities to determine the most appropriate categorization method(s).

METHODS

NM Behavioral Risk Factor Surveillance System (BRFSS) data (2018-2022) were analyzed for potential differences in demographic and health-related factors between Hispanic AI/AN and non-Hispanic AI/AN, AI/AN a/c, and Hispanic adults. Hispanic AI/AN and non-Hispanic AI/AN are mutually exclusive categories. AI/AN a/c and Hispanic are inclusive categories that overlap with each other as well as the Hispanic and non-Hispanic AI/AN groups.

The NM BRFSS is an annual, statewide telephone health survey of New Mexico adults that is conducted through a collaborative effort between the Centers for Disease Control and Prevention (CDC) and the New Mexico Department of Health. This ongoing, nationwide surveillance system collects data on how common health conditions and behaviors that affect risk for disease and injury are in the population.

The methods of the BRFSS ensure the data is representative of the non-institutionalized adult population. Individuals who are 18 years of age or older, have a cell phone or landline telephone, and live in a private residence or college dormitory can participate in the survey. Participation in the survey is voluntary, and all individual information collected is confidential.

Demographic factors analyzed were age, sex, household income, marital status, and education level. Health-related factors included general self-rated health, healthcare coverage and access, diabetes, current smoking status, and alcohol consumption. Health-related factors were selected based on data requests received by the NMDOH Tribal Epidemiologist.

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Sex stratified prevalences were calculated using the survey command in Stata 18.0. Sex stratified prevalences were used because there was a difference in the proportions of male to female respondents between Non-Hispanic AI/AN & Hispanic AI/AN within the BRFSS sample that were exaggerated rather than mitigated when survey weights were used in estimation. For this descriptive analysis, groups were considered to have different prevalences if the 95% confidence intervals did not overlap.

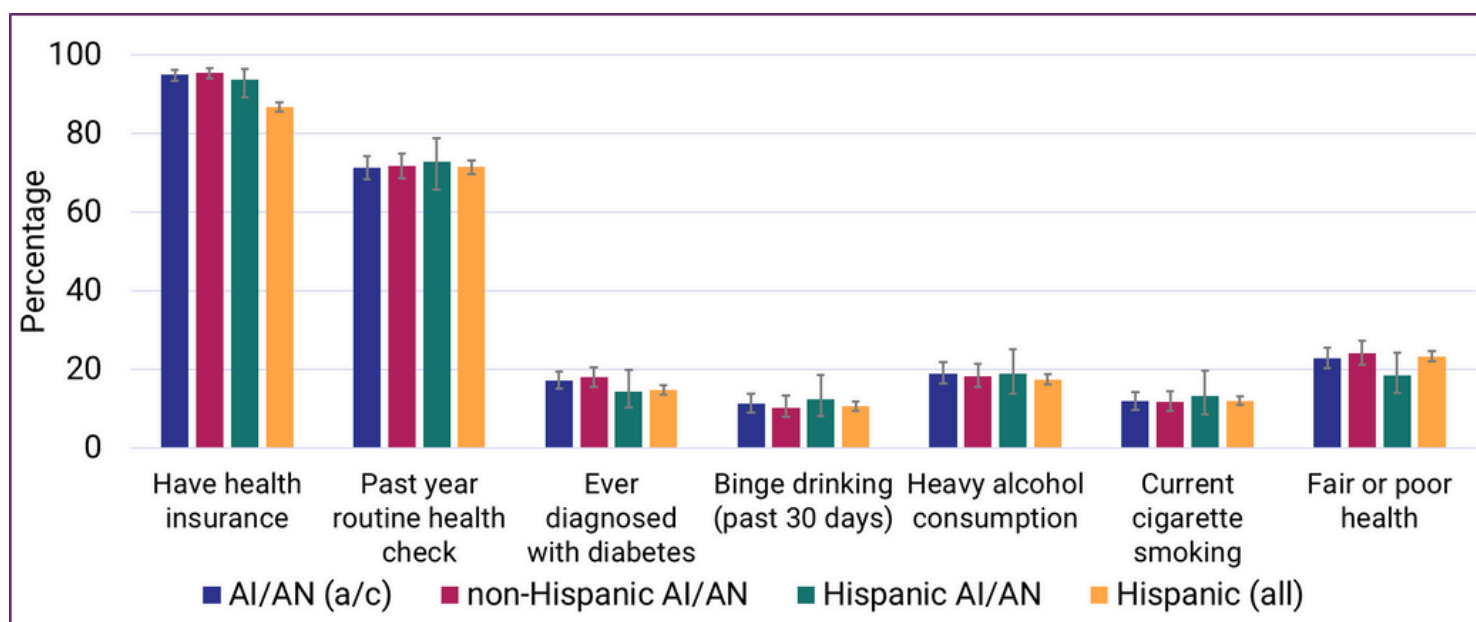
RESULTS

In NM, AI/AN a/c adults are 13.4% of the adult population and 25.8% of AI/AN a/c adults are also Hispanic (Table 1). There were no differences in education or age distribution between Hispanic AI/AN and non-Hispanic AI/AN adults. Among females, Hispanic AI/AN had significantly higher household income and higher marriage prevalence than non-Hispanic (Table 1). Prevalence of analyzed health behaviors and conditions did not significantly differ between Hispanic and non-Hispanic AI/AN females (Figure 1).

Table 1: Demographics of American Indian/Alaska Native and Hispanic Adults
New Mexico, 2018-2022

	Female				Male			
	AI/AN (a/c) % [95% CI]	non-Hispanic AI/AN % [95% CI]	Hispanic AI/AN % [95% CI]	Hispanic (all) % [95% CI]	AI/AN (a/c) % [95% CI]	non-Hispanic AI/AN % [95% CI]	Hispanic AI/AN % [95% CI]	Hispanic (all) % [95% CI]
Age								
18-44	51.5 [48.2, 54.7]	50.8 [47.2, 54.4]	55.0 [47.9, 61.9]	52.2 [50.4, 53.9]	55.3 [51.9, 58.6]	55.6 [51.6, 59.5]	54.7 [48.1, 61.1]	55.0 [53.1, 56.9]
45-64	31.6 [28.8, 34.6]	32.6 [29.4, 36.0]	27.4 [22.0, 33.5]	29.9 [28.3, 31.5]	31.1 [28.1, 34.2]	30.4 [27.0, 34.1]	32.6 [26.9, 38.8]	29.8 [28.2, 31.6]
65+	16.9 [14.7, 19.4]	16.6 [14.1, 19.5]	17.7 [13.3, 23.1]	18.0 [16.8, 19.2]	13.7 [11.7, 16.0]	14.0 [11.5, 17.0]	12.7 [9.6, 16.7]	15.2 [14.2, 16.4]
Education								
<Highschool	13.6 [11.5, 16.0]	14.6 [12.2, 17.5]	10.8 [7.1, 15.9]	24.5 [23.0, 26.2]	16.9 [14.3, 19.8]	15.0 [12.3, 18.2]	20.8 [15.5, 27.3]	24.1 [22.3, 25.9]
Highschool Graduate / GED	68.9 [65.9, 71.7]	69.1 [65.8, 72.3]	66.6 [59.7, 72.8]	59.8 [58.0, 61.5]	72.3 [69.2, 75.2]	74.6 [71.1, 77.8]	67.1 [60.6, 73.1]	62.3 [60.4, 64.2]
College Graduate	17.5 [15.4, 19.9]	16.2 [13.9, 18.9]	22.7 [17.6, 28.7]	15.7 [14.6, 16.9]	10.8 [9.3, 12.6]	10.5 [8.6, 12.6]	12.1 [9.1, 15.9]	13.6 [12.6, 14.8]
Household Income								
<\$25,000	48.9 [45.5, 52.4]	53.8 [50.0, 57.6]	32.1 [25.5, 39.6]	42.2 [40.3, 44.2]	42.4 [38.9, 46.1]	46.9 [42.6, 51.3]	34.0 [27.8, 40.8]	31.8 [29.9, 33.7]
\$25,000-\$75,000	37.0 [33.7, 40.4]	35.1 [31.6, 38.8]	43.8 [36.1, 51.9]	40.7 [38.7, 42.6]	41.0 [37.4, 44.6]	37.7 [33.6, 42.0]	48.0 [41.0, 55.0]	46.0 [43.9, 48.1]
\$75,000+	14.1 [11.6, 16.9]	11.1 [8.8, 13.9]	24.1 [17.3, 32.5]	17.1 [15.7, 18.7]	16.6 [14.1, 19.6]	15.4 [12.3, 19.1]	18.0 [13.6, 23.5]	22.2 [20.57, 24.0]
Marital Status								
Married / Unmarried Couple	39.4 [36.1, 42.7]	34.8 [31.4, 38.3]	54.7 [46.7, 62.5]	52.9 [50.9, 54.9]	39.4 [35.9, 42.9]	37.2 [33.3, 41.4]	43.5 [36.5, 50.7]	54.7 [52.5, 56.8]
Divorced / Separated / Widowed	23.9 [21.0, 27.1]	25.6 [22.2, 29.4]	18.8 [14.1, 24.5]	24.2 [22.6, 25.9]	18.6 [16.0, 21.5]	19.6 [16.4, 23.2]	17.1 [12.9, 22.3]	15.9 [14.5, 17.3]
Never Married	36.8 [33.3, 40.4]	39.6 [35.7, 43.7]	26.5 [19.7, 34.7]	22.9 [21.2, 24.7]	42.0 [38.3, 45.8]	43.2 [39.0, 47.6]	39.4 [32.2, 47.2]	29.5 [27.5, 31.6]

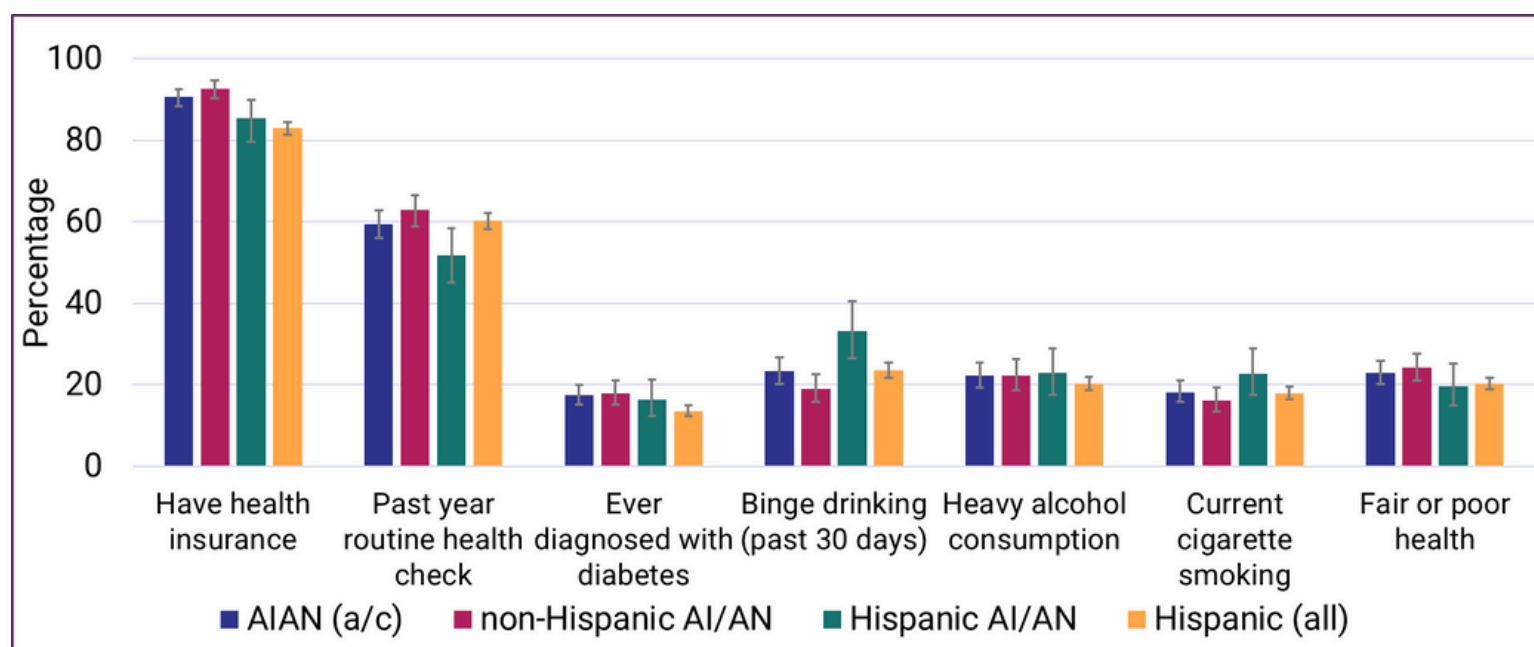
Figure 1: Health Related Factors Among Female American Indian/Alaska Native and Hispanic Adults
New Mexico, 2018-2022



Abbreviations: American Indian or Alaska Native (AI/AN), American Indian or Alaska Native alone or in combination with other races or ethnicities (AI/AN (a/c))

Among males, non-Hispanic AI/AN have a significantly higher prevalence of health insurance coverage and past year routine healthcare check-up than Hispanic AI/AN. Hispanic AI/AN males have a lower prevalence of routine check-up than Hispanic males (all races combined) despite a higher prevalence of health insurance coverage. Male Hispanic AI/AN also had a significantly higher prevalence of binge drinking than non-Hispanic AI/AN males, but no difference in heavy drinking.

Figure 2: Health Related Factors Among Male American Indian/Alaska Native and Hispanic Adults
New Mexico, 2018-2022



Abbreviations: American Indian or Alaska Native (AI/AN), American Indian or Alaska Native alone or in combination with other races or ethnicities (AI/AN (a/c))

DISCUSSION

“AI/AN alone or in combination” is an important categorization method for analyses and reporting but is not a homogenous monolith. This exploratory analysis shows that AI/AN a/c categorization masks variations in social drivers of health and health behaviors that may have implications for culturally appropriate health promotion and interventions that aim to address disparities experienced by AI/AN adults.

NM BRFSS data are excellent for health equity data analysis, particularly around race and ethnicity because the BRFSS allows for self-identification. Respondents may select as many groups as they identify with, which allows for flexibility in creating analytic categories. Additionally, due to the size and proportion of New Mexico’s AI/AN and Hispanic populations and that the NM BRFSS oversamples AI/AN adult populations, these data are uniquely suited for exploring health disparities among specific categories of these larger groups. In addition to robust sampling methodology, BRFSS survey design and post-stratification weights are applied during data analysis to ensure the results are representative of the adult population. Additional strengths of the NM BRFSS include the participation of local Tribal Epidemiology Centers on the NM BRFSS Advisory Committee and in state questionnaire development. NM BRFSS interviewers receive training specific to AI/AN populations from the NMDOH Office of the Tribal Liaison. The Office of the Tribal Liaison also provided valuable guidance and input for this work.

While NM BRFSS data and this analysis have many strengths, both the data and this analysis also have limitations. As part of a national surveillance system, the NM BRFSS Program has limited control over the questionnaire and the wording of many survey questions. National questions are not designed for New Mexico’s specific populations. BRFSS data excludes unhoused and institutionalized adults. NM BRFSS interviews are conducted in both English and Spanish but not translated to local indigenous languages such as Diné Bizaad, Keres, Tewa, and Zuni. While it is a strength that local Tribal Epidemiology Centers are involved, that is currently the extent of Tribal input.

Since this exploratory analysis showed there are differences in the prevalence of some social drivers of health and health behaviors within the AI/AN a/c category, further exploration of the impact of different race/ethnicity reporting methods on health equity/health disparity data analysis in NM is planned.

RECOMMENDATIONS

For implementation of OMB SPD No. 15 revisions for race/ethnicity data collection & reporting

- Plan ahead
- Create a workgroup focused on SPD No.15 revisions
- Evaluate current data collection methods and data systems race and ethnicity categories.
- Develop a plan to engage with AI/AN populations from beginning

For working with AI/AN populations

- Engage with AI/AN populations early
- Determine if the AI/AN a/c category is appropriate for each sovereignty or community and include locally relevant categories.
- Connect with your agency’s Tribal Liaison or Indian Affairs Department
- Conduct a formal or informal consultation

Public Health Data Collection & Reporting Methods Matter

Public Health data are used in many ways:

- to develop laws and policies to support our health;
- to identify and track disease epidemics;
- to direct limited funds to the most effective interventions.

When populations are incorrectly identified and categorized, they may not receive the support they need. Appropriate analysis and reporting are essential for working towards health equity.

Collecting detailed, self-reported race and ethnicity data whenever possible allows for flexibility in analysis and appropriate reporting.

REFERENCES

1. National Congress of American Indians (2020). Tribal Nations and the United States: An Introduction. Washington, D.C., February 2020.
2. U.S. Office of Management and Budget. (2024). The 2024 Statistical Policy Directive No. 15. <https://spd15revision.gov/content/spd15revision/en/2024-spd15.html>
3. NCAI Policy Research Center. (2016). Disaggregating American Indian & Alaska Native data: A review of literature. Washington DC: National Congress of American Indians.
4. Urban Indian Health Institute (2020). Best Practices for American Indian and Alaska Native Data Collection. <https://www.uihi.org/resources/best-practices-for-american-indian-and-alaska-native-data-collection/>

ADDITIONAL RESOURCES

- **New Mexico Indian Affairs Department:** <https://www.iad.nm.gov/>
 - State Tribal Collaboration Act (2009): <https://www.iad.nm.gov/wp-content/uploads/2025/08/ARTICLE-18-State-Tribal-Collaboration-Act.pdf>
- **New Mexico Department of Health's Office of Tribal Liaison:** <https://www.nmhealth.org/about/asd/ohe/otl/>
 - NMDOH State-Tribal Consultation, Collaboration and Communication Policy: <https://www.nmhealth.org/publication/view/policy/847/>
- **New Mexico Tribal Epidemiology Centers:**
 - Albuquerque Area Southwest Tribal Epidemiology Center: <https://www.aaihb.org/albuquerque-area-southwest-tribal-epidemiology-center/>
 - Navajo Epidemiology Center: <https://nec.navajo-nsn.gov/>

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New Mexico Department of Health

Community, Health Equity & Tribal Epidemiology Section
Community and Health Systems Epidemiology Bureau
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[NMHealth Helpline \(1-833-796-8773\)](https://www.nmhealth.org/helpline)

988 Suicide and Crisis Lifeline provides free, confidential, 24/7 mental health support in New Mexico. Call or text 988 for help anytime, for anyone, any struggle.