NHANES Dataset Summary

Sabrina Ianni 260189219

2025-09-29

The NHANES dataset

This NHANES dataset covers three waves of data collection: 2015, 2016, and 2017. It examines patterns in blood pressure across gender, age, and ethnicity, along with other demographic data. In this summary report, we focus specifically on key statistics related to gender and ethnicity, across the three waves.

Proportion of male participants by wave:

The table (Table 1) below presents the percentage of male participants in the dataset for each wave. As shown, the proportion of male participants remains relatively consistent across waves, averaging around 49%. We also note that our largest sample was in 2015 with over 10000 participants, with the sample size slightly decreasing with each wave.

Table 1: Distribution of Males by Wave

Year	Sample	No. of Males	% of Males
2015	10175	5003	49.2
2016	9971	4892	49.1
2017	9254	4557	49.2

Distribution of ethnicities by wave:

The table (Table 2) below shows the proportion of participants from each ethnic group across the three waves. The majority of participants were categorized as "White," while the smallest groups were "Other" and "Other Hispanic." Overall, the distribution of ethnicities remained relatively consistent across all waves.

Table 2: Ethnicity Distribution by Wave (Counts & Percentages)

	Asi	ian	Bla	ıck	Mex	ican	Ot	her	Other	Hispanic	Wł	nite
Wave	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)
2015	1074	10.6	2267	22.3	1730	17.0	470	4.6	960	9.4	3674	36.1
2016	1042	10.5	2129	21.4	1921	19.3	505	5.1	1308	13.1	3066	30.7
2017	1168	12.6	2115	22.9	1367	14.8	634	6.9	820	8.9	3150	34.0

Table 3: Summary Statistics by Wave

Year	n	Minimum SBP	Maximum SBP	Mean SBP	SD SBP
2015	7528	64.7	228.7	118.3	18.1
2016	7363	74.0	231.3	120.4	18.4
2017	6713	72.7	234.0	121.7	20.3

Note: SBP: Systolic blood pressure, SD: Standard Deviation

Summary Statistics of Average Systolic Blood Pressure by year:

Table 3 presents summary statistics for average systolic blood pressure, including the mean, minimum, maximum, and standard deviation for each wave. The results show a consistent trend across all three waves, with only slight variations in the measured values.

References

Disease Control and Prevention (2025)

Disease Control, Centers for, and Prevention. 2025. "National Health and Nutrition Examination Survey (NHANES)." https://wwwn.cdc.gov/nchs/nhanes/.