NHANES Genetic Data Repository Weights Documentation

Survey Sample Weights

Examination weights are appropriate for NHANES III Phase II, NHANES 1999-2002, NHANES 2007-2008, NHANES 2009-2010, NHANES 2011-2012, NHANES 2019-2020 and NHANES 2021-2023 genetic subsample.

For further information on the examination weights see the NHANES Analytic Guidelines:

NHANES III: NHANES III Analytic and Reporting Guidelines

NHANES 1999-2010: Vital and Health Statistics Reports Series 2, Number 161, September 2013

NHANES 2011-2016: NHANES: Analytic Guidelines, 2011-2014 and 2015-2016

NHANES 2017-2020: <u>Vital and Health Statistics, Series 2, Number 190</u>
NHANES 2021-2023: <u>Brief Overview of Sample Design, Nonresponse Bias</u>
Assessment, and Analytic Guidelines for NHANES August 2021-August 2023

Affymetrix Genome-Wide Human SNP Array 6.0 Subsample

Subsample Description

A total of 3,166 participants (non-Hispanic white n = 1,692, non-Hispanic black n = 1,344, Mexican American, other races & other Hispanic n = 130) from NHANES 1999-2002 genetic subsample were genotyped at Children's Hospital of Philadelphia, Center for Applied Genomics, using the Affymetrix Genome-Wide Human SNP Array 6.0.

Weights Description

Non-Hispanic white and non-Hispanic black

Separate sample weights were created for the non-Hispanic white and non-Hispanic black participants due to the different proportions of NHANES 1999-2002 included in each subgroup. These nationally representative sample weights can be used to obtain separate estimates for the non-Hispanic white and non-Hispanic black subgroups. The non-Hispanic white and non-Hispanic black subgroups should not be combined in any weighted analysis.

Mexican American, other races & other Hispanic

Sample weights were not created for participants in the Mexican American, other races & other Hispanic subgroup due to the small proportion of NHANES 1999-2002 participants in this Affymetrix subsample. Analyses of data for this other race/ethnic subgroup or this subgroup combined with the non-Hispanic white and/or the non-Hispanic black subgroup should be conducted and interpreted as a convenience sample.

Weighting Procedure

Sample weights were created using SUDAAN's WTADJUST procedure. Nonresponse adjustments to the 4-year MEC weights (WTMEC4YR) were done separately for the

non-Hispanic white and non-Hispanic black subgroups using sex and age group categories. The sample weight WTGW4YR should be used for analysis of the non-Hispanic white subgroup and the sample weight WTGB4YR should be used for the non-Hispanic black subgroup.

Questions: Email NHANESGenetics@cdc.gov

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