Add Health
The National Longitudinal Study of Adolescent to Adult Health

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Wave VI Biomarker Weights

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This document provides a brief overview of the Wave VI biomarker sample weights. Whenever possible, weight generation methods in Wave VI mirrored those of Wave V to ensure comparability between waves. This document is one in a set of Wave VI user guides. User guides are also available to describe protocols for the following biological measures at Wave VI:

- Anthropometry
- Baroreflex Sensitivity & Hemodynamic Recovery
- Cardiovascular Measures
- Glucose Homeostasis
- Hepatic Injury
- Home Exam – Medication Use
- Home Exam Questionnaire and QC Metrics
- Infection
- Inflammation and Immune Function
- Lipids
- Neurodegeneration
- Renal Function

Acknowledgement

Suggested Citation

Griffiths AM, Angel RA, Grago J, Qu L, Carrier KS, Hummer RA, Whitsel EA. Add Health Wave VI Documentation: Biomarker Weights, 2025; Available from: https://doi.org/10.17615/v674-qv18.

1. Introduction and Methods

The Wave VI mixed-mode full sample includes 11,979 participants. The Wave VI cross-sectional biomarker full sample includes 6,073 participants, none of whom have missing grand sampling weights. Corresponding Wave VI biomarker weights include the (1) *Cross-sectional, Optimized Biomarker Full Sample Weight* (W6BIOWGT), (2) a *Longitudinal, Optimized Biomarker Sample Weight for Waves I, V and VI* (W6BIOWGT_156), and (3) a *Longitudinal, Optimized Biomarker Sample Weight for Waves I, IV, V and VI* (W6BIOWGT_1456). Optimization of (1-3) is described elsewhere.[1]

In sum, post-stratification weights were generated through a multi-step, complex process to ensure that the resulting weights met expectations and were generalizable to the Add Health 1994-95 school-based cohort population. Quality control evaluations were conducted on all three biomarker weights, which included macro- and micro-level adjustments. Weight totals and subgroup totals by age, gender, and race were used to calibrate and adjust weights to align relatively close to the respective totals based on the Wave I weights. Two additional variables (region and education) were not used in the calibration process but were used to help determine whether the weight totals were generally close to the corresponding Wave I weight totals across most categories.

2. Results

Figure 1 provides biomarker sample weight summary statistics with whole-unit precision.

Weight	Description	n	Min	Max	Mean	SD
W6BIOWGT	Cross-sectional, Optimized Biomarker Full Sample Weight	6,073	2	47,557	3,494	4,604
W6BIOWGT_156	Longitudinal, Optimized Biomarker Sample Weight for Waves I, V and VI	3,633	2	74,728	5,841	6,996
W6BIOWGT_1456	Longitudinal, Optimized Biomarker Sample Weight for Waves I, IV, V and VI	3,395	2	85,879	6,251	7,572

Figure 1. Biomarker Sample Weight Summary Statistics

3. References

1. Liao, D. & Cooney, D. Aiello, A.A., Hummer, R.A. *Add Health Wave VI Documentation: Guide to Using Cross-Sectional and Longitudinal Weights in Wave VI*. 2025. Chapel Hill, NC: Carolina Population Center, University of North Carolina at Chapel Hill. Available from: https://doi.org/10.17615/8s2m-yk29.