

NHANES Quality Control Protocol for Large-Scale Genome Assays

1. If genotype success rate for a sample is not greater than 95%, the sample fails quality control.
2. If genotype success rate for a variant is not greater than 95%, the variant fails quality control.
3. If minor allele frequency for a variant is not greater than 1%, the variant fails quality control.
4. Deviations from Hardy Weinberg (HW) proportions are assessed separately for each of the three largest race/ethnicity groups using chi-square goodness-of-fit tests. If two of the three race/ethnicity groups deviate from HW proportions at $p < 0.001$, the variant fails quality control.

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