NJHANES: New Jersey Health and Nutrition Examination Survey

NJHANES Screening Questionnaire

If you received a letter in the mail to participate in NJHANES, click on the **NJHANES Survey link** to see if anyone in your household is eligible to participate in the study

NJHANES Study Contact Information

Phone number: 609-406-6924
Email address: ecls.biomonitoring@doh.nj.gov

Principal Investigator: Zhihua (Tina) Fan, PhD

Summary of NJHANES

Objectives

- Conduct NJ's first population-based surveillance study using a multistage, cluster, random sampling approach to recruit 500 residents (ages 6 and up) stratified by demographic subdomains across NJ.
- Collect health and nutritional status information from participants.
- Determine body burdens of select environmental contaminants (see below for list) in recruited residents.
- Establish database for 1) estimating prevalence(s) of health status in NJ population, 2) assessing environmental contaminant levels in NJ population that will be directly compared with national or international levels from other population studies, and 3) serving as a baseline for biomonitoring studies within the state that are currently being conducted or will be planned for the future.

Summary of approaches

- NJ's 2,010 census tracts is grouped into 12 regional areas, with six areas being randomly selected for the first year of campaign. Within each area, 4 census tracts will be randomly selected and 100 households will be randomly selected in series. The selected households will be contacted, interviewed, screened, and recruited to participate in NJHANES. The following year-long campaign will be repeated for the remaining 6 regional areas. An

estimated 4800 households will be selected through this approach, and 500 participants will be recruited to complete the NJHANES within the scheduled two-year period.

- Questionnaires will be administered to collect a variety of information, including 1) demographics, 2) socioeconomic status, 3) personal behaviors, 4) physical activities, 5) housing characteristics, 6) health insurance, 7) health conditions, 8) dietary recall, and 9) exposures that are associated with environmental contaminants listed below.
- Body weight, height, heart rate, and blood pressure will be measured with portable devices by trained field staff.
- Specimens (~10 mL blood and ~30 mL urine) will be collected from each participant to determine environmental contaminant levels, including 1) metals in blood and urine, 2) per- and polyfluoroalkyl substances (PFAS) in serum, 3) polychlorinated biphenyls (PCBs) in serum, 4) polybrominated diphenyl ethers (PBDEs) in serum, 5) organochlorine pesticides (OCPs) in serum, 6) volatile organic compound (VOC) metabolites in urine, 7) polycyclic aromatic hydrocarbon (PAH) metabolites in urine, and 8) nicotine metabolites in serum. Urine specific gravity and creatinine and serum lipids will be measured for corrections during the data analysis stage. ***No other testing will be conducted on the samples other than those listed above***.
- Analyzed results will be reported back to study participants, if desired, according to the Clinical Laboratory Information Amendment (CLIA) and the Health Insurance Portability and Accountability Act (HIPPA) guidelines. Results communication will include environmental contaminant levels and data interpretation for an elevated individual result compared to the US population level. In certain case, direct contact may be warranted for outreach or retesting purposes. All participants will receive educational materials with factsheets and ways to minimize environmental exposures in daily life.
- Weights for individual sample persons will be developed and used throughout the implementation of NJHANES to adjust for 1) unequal probabilities at each selection stage, 2) varying response/recruitment rates, 3) nonresponse in selected households and deselection in responded households, 4) decline or missing data in physical exam and lab analysis results, and 5) poststratification for compensating inequalities between the sample population and the target population. *Individual results are private and will not be published.*