

The National Health and Nutrition Examination Survey

Yinong Chong, Rosemarie Hirsch,
Cheryl Fryar, and Jennifer Dostal
Centers for Disease Control and Prevention, USA

NHANES is the only national survey that collects extensive health information from both face-to-face interviews and medical examinations. NHANES datasets became publicly available on its website in 2000, and a growing number of analysts are using the NHANES data to address major public health issues in the U.S. To meet the growing demands of a wide range of data users, a team of content experts, instructional designer, and web developer from NCHS and the National Cancer Institute jointly developed this web-based tutorial to promote broader and more proficient use of NHANES data. The tutorial simulates a real life experience of how to conduct an analytical project from beginning to end, with a step-by-step flow through typical analytic procedures. The data preparation component focuses on navigating through the data structure and vast amounts of information, and on identifying and retrieving NHANES data files and variables of interest. The analysis component focuses on conducting statistical analyses with appropriate attention paid to the nuances of NHANES data, given its complex sample design, weighting requirements, and data structure. In addition, annotated SAS and SUDAAN program code and analytical guidance are organized and integrated into different modules and tasks to facilitate this learning process. The web tutorial has gone through numerous rounds of formal and informal usability testing, which greatly enhanced the design features to accommodate different learning styles. The tutorial has also been accredited by CDC's online learning system as four stand alone courses, allowing physicians, nurses, and epidemiologists to receive continuous education units upon successful completion. This basic tutorial will be further expanded to include STAT programs, and modules specific to dietary data and historic NHANES datasets.