The Boston Area Community Health (BACH) Survey

New England Research Institutes (NERI) offers analyses of the Boston Area Community Health (BACH) Survey data, an unparalleled dataset with longitudinal information on urologic symptoms, sexual function, and endocrinology.

BACH is a population-based observational research study that was conducted from 2002-2005. This survey used a multi-stage stratified random sample to recruit 5,502 men and women aged 30-79 years in three racial/ethnic groups from the city of Boston. Follow-up assessments of BACH were completed in 2010 (BACH II) and 2012 (BACH III) on 4,144 and 3,155 subjects, respectively. An overview of the measures collected in the BACH study is available.

Unmatched Depth of Experience
Decades of experience and close ties to clinical experts and key opinion leaders in the fields of urology, sexual health, and endocrinology give NERI the expertise required to conduct efficient, high-quality statistical analyses, clinical reports, and manuscripts.

Unique Strengths
NERI is a recognized leader in the field of epidemiology. NERI provides its clients with the following core organizational strengths, which set it apart as a research partner upholding the highest scientific and ethical standards:

• State-of-the-science study design, metrics, and statistical analysis
• In-house key opinion leaders in urology, sexual health, and endocrinology
• Dissemination of study data in major peer-reviewed journals and via award-winning Media department
• Extensive experience with challenging research topics and populations
• Demonstrated success in studying racial/ethnic and gender disparities in urology, sexual health, and endocrinology

“The BACH study is a highly visible internationally respected random community-based cohort study providing epidemiological and clinical understanding of major disease processes. It covers the fields of urology, endocrinology, diabetes/prediabetes, sleep medicine and bone health. Subject retention over this decade-long study and our scientific productivity have been outstanding.”

John B. McKinlay, PhD
Senior Vice President, NERI

neriscience.com/epidemiology
Proven Track-Record of Publication
NERI has published over 80 manuscripts in top-tier journals using the BACH data only, demonstrating our productivity. Below are key publications in major areas of concentration.

Urology

Sexual Health

Endocrinology

BACH/Bone
- Ceglia et al. Serum 25-hydroxyvitamin D concentration and physical function in adult men. *Clin Endocrinol (Oxf)*. 2011
- Ceglia et al. Serum 25-hydroxyvitamin D concentration and physical function in adult men. *Clin Endocrinol (Oxf)*. 2011

BACH Sleep
- Fang et al. Traffic-related air pollution and sleep in the Boston Area Community Health Survey. *J Expo Sci Environ Epidemiol*. 2014

Boston Area Community Health: Ancillary Studies
The BACH Survey provided a rich resource that was utilized for three additional studies on osteoporosis among men, sleep, and erectile function. These studies involved new clinic-based assessments as well as secondary analyses of existing data. Over 40 papers in scientific journals have been published based on the results of these ancillary studies.

<table>
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<tr>
<th>BACH/Bone I &amp; II</th>
<th>BACH Sleep</th>
<th>Endothelial Function and Erectile Dysfunction</th>
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<td><strong>Objective:</strong> To examine racial/ethnic disparities in musculoskeletal health among men.</td>
<td><strong>Objective:</strong> To examine racial/ethnic disparities in sleep and chronic disease.</td>
<td><strong>Objective:</strong> To evaluate the association between endothelial function and erectile function.</td>
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<td><strong>Study Design:</strong> Longitudinal cohort study of 1,219 men.</td>
<td><strong>Study Design:</strong> Multilevel modeling of existing data.</td>
<td><strong>Study Design:</strong> Cross-sectional study of 400 men.</td>
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<td><strong>Measures:</strong> DXA (bone mineral density, bone loss, fat and lean mass), XtremeCT (bone microarchitecture), muscle strength, physical function.</td>
<td><strong>Measures:</strong> Neighborhood influences, air pollution, Berlin sleep questionnaire.</td>
<td><strong>Measures:</strong> Brachial artery flow-mediated dilation, reactive hyperemia, BPH, ED, Sexual Function.</td>
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<td><strong>Major Findings:</strong> Although race/ethnicity appears to contribute to BMD and bone microarchitecture, it does not contribute to bone loss.</td>
<td><strong>Major Findings:</strong> There are substantial differences by race/ethnicity and socioeconomic status in the prevalence of sleep-related problems. Sleep-related problems were associated with the onset of urologic symptoms as well.</td>
<td><strong>Major Findings:</strong> Results suggest that microvascular dysfunction may be a key link between ED and cardiovascular disease risk.</td>
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To learn more about NERI’s proprietary BACH dataset, please contact John McKinlay, Director of Epidemiology:

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