The Hispanic Community Health Study – Study of Latinos

Overview

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Overview

• Ongoing Epidemiologic Study of Latino Health
• Funded by NHLBI till 2019
• ~16,000 participants from 4 US cities
• Well characterized phenotype
  – Psychosocial, behavioral, biologic (DNA, RNA, Serum and urine banked)
  – GWAS under way
• Exam 2 scheduled for Summer 2014
Primary Goals

- To identify the prevalence of cardiovascular and pulmonary disease and other conditions in U.S. Hispanic/Latino groups of diverse backgrounds.
- To identify the prevalence of factors that protect from or increase the risk for cardiovascular and pulmonary disease and other conditions in diverse U.S. Hispanic/Latino groups.
- To identify all-cause mortality, and the incidence of fatal and non-fatal cardiovascular and pulmonary events in diverse U.S. Hispanic/Latino groups.
HCHS/SOL Field Centers & Coordinating Center

Chicago/Northwestern
Martha Daviglus, PI

Bronx/Einstein
Robert Kaplan, PI

NIH – NHLBI
Larissa Avilés-Santa, Project Officer

UNC Chapel Hill Coordinating Center
Lisa LaVange, PI
Diane Catellier & Gerardo Heiss, Co-PIs

San Diego
Greg Talavera, PI

Miami
Neil Schneiderman, PI
16,000 Participants
Random sampling of the local population
Representative of the local communities

- Ages: 18 - 74 years
  - 6,000 ages 18-44 years
  - 10,000 ages 45-74 years

- Approximately 4,000 persons per Field Center who self-identify with any of the following Hispanic/Latino heritage groups:
  - Mexicans
  - Puerto Ricans
  - Cubans
  - Dominicans
  - Central/South Americans
  - Other Hispanics/Latinos
Study Timeline

- Baseline Exam Visits March 2008 – June 2011
- First AFU ends for all participants Jan 2013
- Second AFU ends for all participants Jan 2014
- Third AFU ends for all participants Jan 2015
Interview/Medical History

- **Lifestyle and Habits**
  - Tobacco and alcohol use, physical activity
- **Nutrition**
  - Two 24-hour food recalls
  - Food propensity questionnaire at the first annual follow-up phone call
  - Dietary habits and patterns
- **Socioeconomic**
  - Education, Annual Household Income and Home ownership
  - Relative SES position (ladder)
  - Occupational History and Exposure
- **Acculturation and Psycho-Social Factors**
  - Languages spoken and preferred language, Ethnic Identity, Cultural and Family Values, Social Network, Perceived Discrimination, Neighborhood Safety, Religion, Traditional Medicine Beliefs and Practices, Health Insurance, Access to and Utilization of Health Services
Procedures

• Vital Signs
  – Blood pressure (ankle and brachial) and heart rate

• Anthropometry
  – Height, weight, waist and hip circumference and percent body fat

• Electrocardiogram

• Spirometry and sleep studies
  – Spirometry: pre- and post inhaled bronchodilators
  – Portable Sleep Monitor - Sleep Apnea

• Oral Glucose Tolerance Test
  – Fasting and 2hr (post glucose load) plasma glucose and insulin levels
Blood Tests

- CBC
- Fasting and 2-hr plasma Glucose and Insulin
- HbA1c
- Highly sensitive CRP and adiponectin
- Lipids (total cholesterol, LDL cholesterol, HDL cholesterol, triglycerides)
- Serum creatinine
- Urine microalbumin/creatinine ratio
- Hepatic enzymes (ALT, AST)
- Hepatitis A, B and C serologies
- Iron, transferrin
- RNA and DNA extraction
- Extra plasma and sera for ancillary studies
- Cystatin-C*(2013)
Disease Endpoints

- Annual follow-up by telephone
  - Ask about change in health status
  - Hospitalizations and visits to the ER
  - Death

- Investigation of hospital events
  - Through copies of hospitalizations and visits to the ER

- Mortality by cause
  - Review of Death Certificates and Hospital Records
  - Next of kin, coroner’s report and primary physician

- Adjudication of fatal and non-fatal cardiovascular and pulmonary events

- Collecting information on new diagnoses (diabetes, hypertension, pulmonary disease, cancer, etc)
Distribution of Study Cohort by Hispanic / Latino Background

- Central & South American: 18%
- Cuban: 12%
- Mexican: 43%
- Puerto Rican: 17%
- Dominican: 3%
- Other Hispanics/Latinos: 7%
Our websites

For investigators:
http://www.cscce.unc.edu/hchs/
http://www.cscce.unc.edu/hchs

For participants:
http://www.saludsol.net