

**ARIC Manuscript Proposal # 916**

**PC Reviewed: 12/10/02**  
**SC Reviewed: 12/13/02**

**Status:   A**  
**Status:   A**

**Priority:   2**  
**Priority:   2**

**1.a. Full Title:**

A comparison of neighborhood contextual effects on mortality in the ARIC and GLOBE cohorts

**b. Abbreviated Title (Length 26 characters):**

Comparing neighborhood effects

**2. Writing Group (list individual with lead responsibility first):**

**Lead:** Ana V. Diez Roux

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**Writing group members:** Luisa Borrell, Kathy Rose, Frank Lenthe (GLOBE Study), Johan Mackenbach (GLOBE Study), other interested ARIC investigators.

**3. Timeline:**

Submit proposal to Publications Committee: November 2002

Complete Analysis: February 2002

Submit draft to Publications Committee: May 2003

#### **4. Rationale:**

Several studies have documented the health consequences of living in areas or neighborhoods characterized by low socioeconomic conditions (1-5). These effects appear to be independent of the socioeconomic position of individuals (6-9). However, the extent to which these associations are modified by the broader country context has not been investigated. It is plausible, for example, that country-level characteristics such as social and health policy modify the extent to which area context is related to health outcomes. The prospective follow up of the ARIC cohort (US) and the GLOBE cohort (Netherlands) affords a unique opportunity to investigate whether contextual area effects differ in two industrialized countries with different social policies.

#### **5. Main Hypothesis/Study Questions:**

Neighborhood contextual effects on mortality are stronger in the US than in the Netherlands.

#### **6. Data (variables, time window, source, inclusions/exclusions):**

Baseline data and mortality follow-up data (to the latest available date) will be used in these analyses. The full dataset will be used. Only persons missing individual-level socioeconomic indicators will be excluded.

Neighborhood socioeconomic indicators will be obtained from the 1990 US Census.

Both census tracts and block groups will be explored as proxies for neighborhoods in these analyses. For reasons of comparability with the GLOBE cohort, area unemployment will be the key area indicator investigated.

Individual-level socioeconomic indicators will be obtained from the baseline and follow up visits of the ARIC cohort. All-cause mortality will be obtained from ARIC follow-up data.

Analogous area-level, individual-level, and mortality data will be obtained from the GLOBE study.

**7.a. Will the data be used for non-CVD analysis in this manuscript?**  Yes  No

Analyses will focus on all cause mortality.

**b. If Yes, is the author aware that the file ICTDER02 must be used to exclude persons with a value RES\_OTH = “CVD Research” for non-DNA analysis, and for DNA analysis RES\_DNA = “CVD Research” would be used?**  Yes  No  
(This file ICTDER02 has been distributed to ARIC PIs, and contains the responses to consent updates related to stored sample use for research.)

**8.a. Will the DNA data be used in this manuscript?**  Yes  No

**8.b. If yes, is the author aware that either DNA data distributed by the Coordinating Center must be used, or the file ICTDER02 must be used to exclude those with value RES\_DNA = “No use/storage DNA”?**  Yes  No

**9. The lead author of this manuscript proposal has reviewed the list of existing ARIC Study manuscript proposals and has found no overlap between this proposal and previously approved manuscript proposals either published or still in active status. ARIC Investigators have access to the publications lists under the Study Members Area of the web site at: <http://bios.unc.edu/units/csc/ARIC/stdy/studymem.html>**

Yes  No

**10. What are the most related manuscript proposals in ARIC (authors are encouraged to contact lead authors of these proposals for comments on the new proposal or collaboration)?**

Lead authors of related proposals (Diez Roux and Borrell) are part of this proposal.