



Institute of Behavioral Science
UNIVERSITY OF COLORADO BOULDER



Early Life Mortality in the US: Analyses with NCHS Restricted-Use Data

**Rick Rogers, Director,
IBS Population Program**

Social and Public Health Significance

“Alarming scale of health disadvantage among children and adolescents in the United States compared with their peers in other high-income countries.”

National Research Council/Institute of Medicine 2013

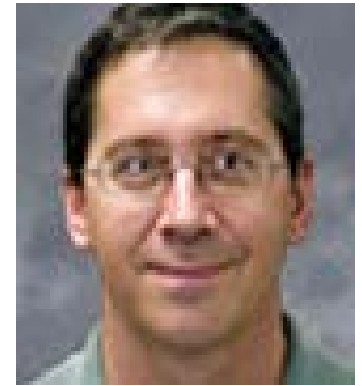
The Study

- America and its households are changing in:
 - Socioeconomic status
 - Family structure
 - Race/ethnic composition
 - Geographic distribution
- How do these changes influence the early life (ages 1-24) survival of American children?
- Data from the National Center for Health Statistics (NCHS)



Bob Hummer, UNC

Project Sites & Collaborators



Dan Powers, UT

- **Project sites**

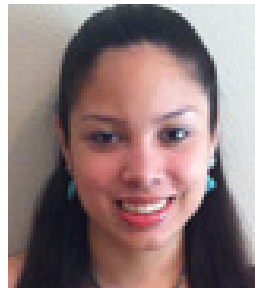
- University of Colorado Boulder
- University of North Carolina
- University of Texas



Liz Lawrence
CU/UNC



David Braudt
UNC



Gracia Sierra
UT



Illiya Gutin
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Andrea Tilstra
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- Restricted-Use Data
 - 1999-2011 NHIS-LMFs
 - Nationally representative
 - Household survey
 - Large (N=246,464 records; 1,885,576 person years)
 - Ages 1-17, followed up through age 24
 - 734 deaths
- Multivariate analyses
 - Cox hazard models
 - Age, sex, race/ethnicity, nativity, state, family structure, parents' education, poverty, home ownership, health insurance

Restricted-Use Variables

- Mortality detail
 - Early life deaths (ages 0-17)
 - Exact dates (rather than quarters)
 - Age, day, month of birth, interview, and death
 - Detailed cause of death (beyond 10 categories)
 - New mortality linked files, when available
- Geographic detail
 - 50 states rather than 4 regions

Accessing NCHS Restricted-Use Data

- Submit proposal to NCHS for review
- Once approved, request data extraction
 - \$2,500 fee for more extensive extraction
- Pass training to access data; SSS not required
- Access data
 - Online system
 - RDC
 - At NCHS
 - At another RDC
 - Output is reviewed by NCHS staff, then emailed
 - Disclosure review for manuscripts

Initial Findings and Conclusions

- Early life mortality
 - Higher among NH blacks than NH whites or Hispanics
 - Does not demonstrate Hispanic Health Paradox
 - Strongly related to SES, esp. poverty
 - Shows some regional differences
- Study provides crucial information for policymakers on vulnerable populations that would benefit most from targeted mortality reduction interventions

Past and Future Projects that Used/Will Use Restricted Data



Adult Suicide Mortality in the United States: Marital Status, Family Size, Socioeconomic Status, and Differences by Sex*

Justin T. Denney, *University of Colorado at Boulder*
Richard G. Rogers, *University of Colorado at Boulder*
Patrick M. Krueger, *University of Colorado at Denver*
Tim Wadsworth, *University of Colorado at Boulder*



Comparing mortality estimates based on different administrative records

RICHARD G. ROGERS¹, JACQUELINE A. CARRIGAN¹ & MARY GRACE KOVAR²
¹University of Colorado; ²National Opinion Research Center (NORC)

- Planned projects to examine NHIS with
 - Detailed occupation
 - Geographic variations
 - Medicare Enrollment and Claims data
 - Social Security Benefit History data

Thank you!



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