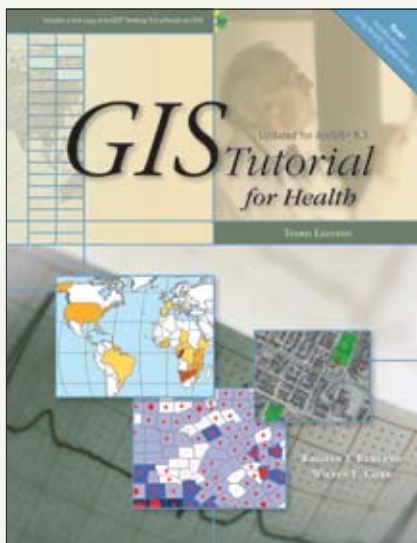


# ESRI Press Workbook Helps Health Professionals Learn GIS



**Requirements:** The ArcGIS Demo Edition software on the included DVD requires the Microsoft® Windows® 2000 or Windows XP operating system.

**Hardware requirements:** A minimum 1.6 GHz processing speed, 1 GB RAM, and 2.4 GB free hard disk space including 50 MB on the operating system drive; an additional 556 MB hard disk space is required for the exercise data. Once installed and registered, the single use software cannot be reinstalled, and the time limit cannot be extended.

## GIS Tutorial for Health, Third Edition

*Kristen S. Kurland and Wilpen L. Gorr*

ISBN: 9781589482241 384 pages \$79.95

*GIS Tutorial for Health* is a unique textbook for teaching geographic information system (GIS) software to health and human services professionals. This book is designed to help you use GIS to address health-related challenges, from disease analysis to policy planning. Tutorials help you gain hands-on experience by visualizing and analyzing health-related data. The scenarios in the workbook address substantive issues of public health, health care, decision support for policy and planning, and the technical requirements of spatial data sources and processing.

Anyone seeking to gain proficiency in GIS, particularly in the health sector, will benefit from using this book including

- Students in health administration, public health, social work, and public policy
- IT specialists
- Health care practitioners
- Researchers
- Public health and human services professionals

In its third edition, *GIS Tutorial for Health* is fully revised and updated for ArcGIS® 9.3 software. To better support skill building and development, this workbook features extended introductions to tutorials that address significant issues of health care and policy planning including a new tutorial that uses the ArcGIS Spatial Analyst extension to estimate demand for automated defibrillators in public places. Complete with an ArcGIS ArcView® software trial DVD and a CD containing new data, this step-by-step tutorial is a valuable resource for the classroom as well as the self-study user.

### About the Authors

Kristen S. Kurland holds a joint faculty appointment at Carnegie Mellon University's Heinz School of Public Policy and Management and School of Architecture, where she teaches GIS, CAD, 3D visualization, and computer-aided facilities management (CAFM).

Wilpen L. Gorr is a professor of public policy and management information systems at Carnegie Mellon University's H. John Heinz III School of Public Policy and Management, where he teaches and researches GIS applications.

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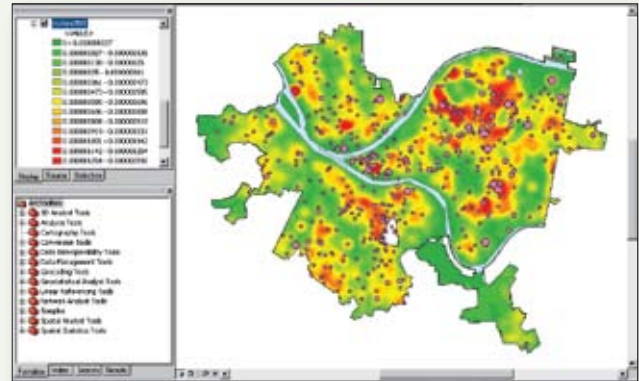


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# GIS Tutorial for Health, Third Edition

## Table of Contents

- Introducing GIS and health applications
- Visualizing health data
- Designing maps for a health study
- Projecting and using spatial data
- Downloading and preparing spatial data
- Geocoding tabular data
- Preparing and analyzing spatial data
- Transforming data using approximate methods
- Using ArcGIS Spatial Analyst for demand estimation
- Case study: Studying food-borne disease outbreaks
- Case study: Forming a national ACHE chapter



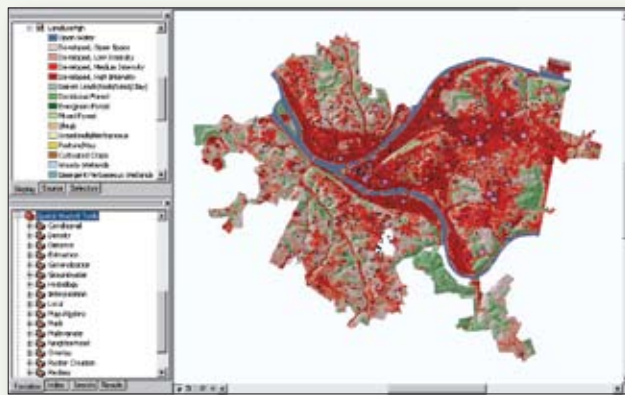
*A density map, based on population data and incidence rates, shows expected heart attacks per square foot in reference to where people live in Allegheny County, Pennsylvania.*

Data courtesy of the Allegheny County Division of Computer Services Geographic Information Systems Group; Tele Atlas, U.S. Census, ESRI (Pop2005); Children's Hospital of Pittsburgh; U.S. Census Bureau; USGS

## Each Chapter

- Begins by describing a real health issue or problem that has a spatial component
- Follows with a conceptual section on the solution approach, providing information and principles on the underlying GIS methods
- Has a step-by-step tutorial that carries out the solution with an approach that uses ArcGIS
- Ends with hands-on exercises using ArcGIS that require independent thinking in applying the knowledge and skills gained in the chapter

The final two chapters of the tutorial contain case studies to work through in project mode. Each case has a series of requirements, input datasets, and structure required for GIS analysis. Additional exercises reinforce lesson concepts about ArcGIS steps and workflows.



*This map uses ArcGIS Spatial Analyst tools to illustrate clusters of heart attack locations in relation to developed areas in Allegheny County, Pennsylvania.*

Data courtesy of the Allegheny County Division of Computer Services Geographic Information Systems Group; Tele Atlas, U.S. Census, ESRI (Pop2005); Children's Hospital of Pittsburgh; U.S. Census Bureau; USGS

For more information on *GIS Tutorial for Health*, Third Edition, contact [healthtutorial@esri.com](mailto:healthtutorial@esri.com).

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