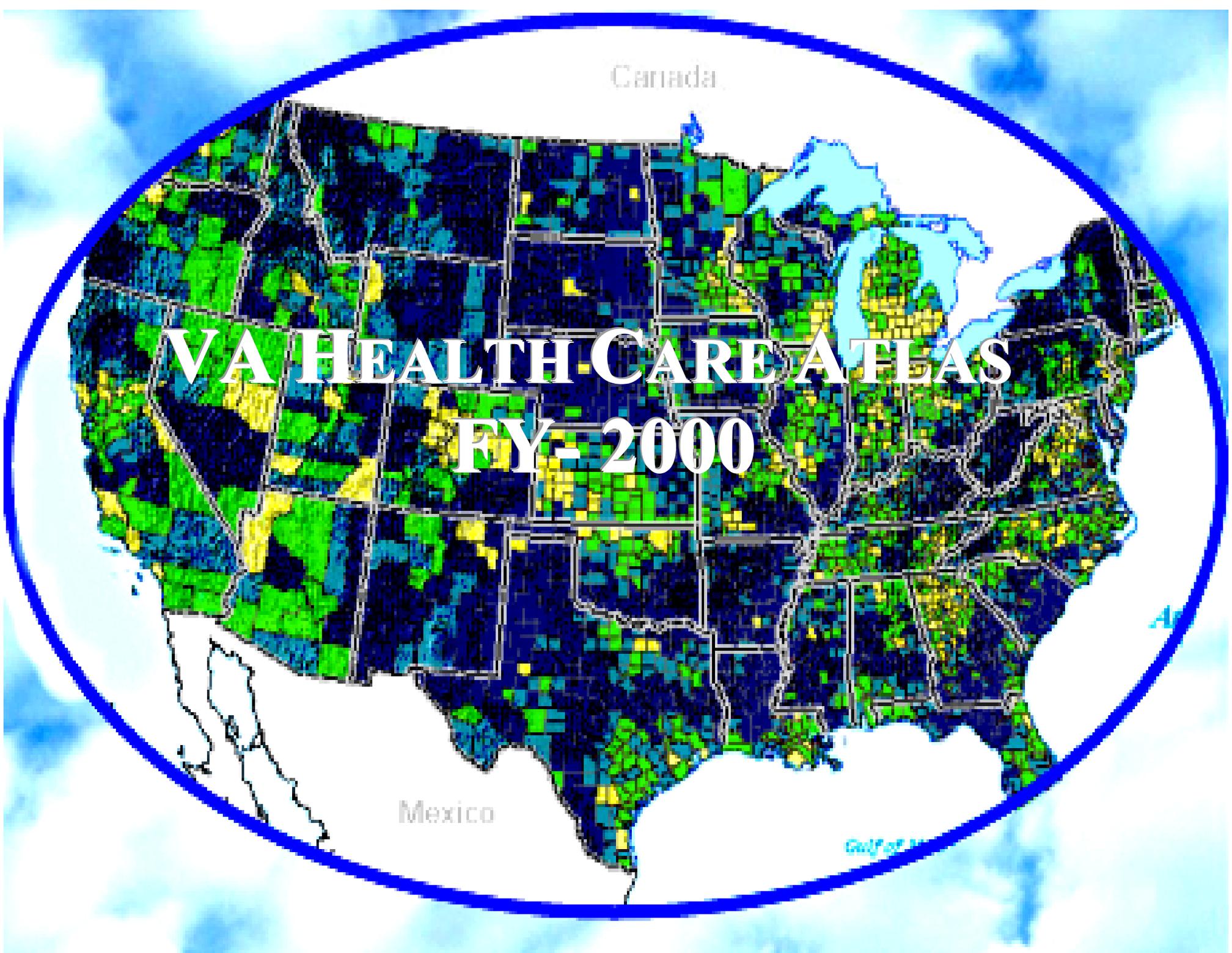


Canada

# VA HEALTH CARE ATLAS FY-2000

Mexico

Gulf of Mexico



## Select GIS Sites and Resources

### National Atlases

- Atlas of United States Mortality  
<http://www.cdc.gov/nchs/products/pubs/pubd/other/atlas/atlas.htm>
- National Atlas of the United States™  
<http://www.nationalatlas.gov/>
- Atlas of Cancer Mortality in the United States 1950-94  
<http://www.nci.nih.gov/atlas/>
- Dartmouth Atlas of Health Care  
<http://www.dartmouthatlas.org/>

### Federal Mapping Tools

- Census Bureau American Fact Finder  
[http://factfinder.census.gov/java\\_prod/dads.ui.homePage.HomePage](http://factfinder.census.gov/java_prod/dads.ui.homePage.HomePage)
- Census Bureau State and County Demographic and Economic Profiles  
<http://www.census.gov/datamap/www/w>
- U.S. Census Bureau Maps and Cartographic Resources  
<http://tiger.census.gov/>

- EPA EnviroMapper  
<http://www.epa.gov/enviro/html/em/index.html>

- NCHS Data Center <http://www.cdc.gov/nchs/r&d/rdc.htm>

### Other Related Web Sites

- Environmental Science Research Institute, Inc.  
<http://www.esri.com>
- Gateway to Internet GIS Sites <http://www.hdm.com/gis3.htm>
- Portal to GIS Information on the Web (by ESRI)  
<http://www.gis.com>

### VHA Sites

- Planning System Support Group (PSSG)  
<http://vaww.pssg.med.va.gov>

### BOOKS

- **Exploring Geographic Information Systems** by Nicholas Chrisman

Radically different from most introductory texts, this book seeks to build critical thinking about the complicated choices involved in the design and use of GIS. Those who read *Exploring Geographic Information Systems* are bound to be

more reflective students and practitioners of GIS. *John Wiley & Sons, 1997, 320 pp.*

■ **Fundamentals of Geographic Information Systems** by Michael DeMers

This approachable text provides a gentle introduction to the concepts needed to think like a GIS practitioner. Comprehensive without being burdened with excessive detail, it offers introductory students insights into the idea of geographic inquiry and spatial discovery. It gives students a thorough familiarity with the wide variety of topics relevant to GIS. *John Wiley & Sons, 1996, 504 pp.*

■ **Getting Started with Geographic Information Systems** by Keith Clarke

This book is a basic-level textbook for the beginning GIS student. It features an abundance of illustrations and photos, extensive chapter-end study aids, and generic laboratory assignments for use with any GIS software. *Prentice Hall, 1997, 353 pp.*

■ **Geographic Information Systems: An Introduction** by Tor Bernhardsen

This intermediate-level introduction defines what a GIS is, traces its historical development, and leads the reader through data models, georeferencing, hardware and software, data collection and quality, databases and their maintenance, spatial analysis, and visualization. Later chapters cover choosing a GIS; data access; standards; and issues of ownership, copyright, cost recovery, and data security. The

last chapter points the way toward the future of GIS. *John Wiley & Sons, 1999, 372 pp.*

■ **An Introduction to Geographical Information Systems** by Ian Heywood, Sarah Cornelius, and Steve Carver

This authoritative, up-to-date introduction is designed for students at all levels, from undergraduates to professionals retraining in GIS. The book focuses on the practical applications of GIS and considers how the technology works. Each chapter addresses a specific theme, from concepts of space to organizational issues and project design. Recommended readings, suggestions for further study, review questions, and an associated web site help the reader come to grips with the subject. *Addison-Wesley Longman, 1999, 296 pp.*

■ **Principles of Geographic Information Systems** by Peter Burrough and Rachael McDonnell (Second Edition)

This book is a comprehensive, concise introduction to the theory and practice of GIS. It covers raster and vector data structures; modules for data input; digital terrain models; methods of spatial analysis, classification, and interpolation; and sources of error in geographical information processing. *Oxford University Press, 1998, 333 pp.*

■ **Zeroing in: Geographic Information Systems at Work in the Community**

*Zeroing In* is an accessible and engaging introduction to GIS for anyone who deals with maps and geographic

information. The book presents a dozen real-world stories of GIS at work in every corner of the community: routing an ambulance, drawing new school boundaries, tracking crime, and more. *ESRI, 1997, 114 pp.*

■ **Geographic Methods for Health Services Research** Edited by Thomas Ricketts, Lucy Savitz, Wilbert Gesler and Diana Osborne

This book represents the third in a series of publications joining geography and rural health. The book is meant to complement the two earlier works by offering interested practitioners, analysts, and policy makers access to the tools of geographic analysis, with special attention given to the issues relevant to rural health care. *University Press of America, 1994 375 pp.*

■ **Geographic Information Systems and Health Applications** Edited by OA Khan and R Skinner.

The use of Geographic Information Systems (GIS) in the health sector is an idea whose time has come. The current applications of GIS in health are diverse and extensive. The present GIS environment is heavily driven by technology and such an approach is indeed logical for the most part. However, the needs of less-developed countries in utilizing the concepts and technologies of mapping should not be neglected in the continuing evolution of GIS. *Geographic Information Systems and Health Applications* presents a sampling of the many applications utilizing GIS in the field of health. *Hershey, PA: Idea Group, INC 2003.*

■ **GIS for Health Organizations.**

*GIS for Health Organizations* gives detailed and compelling answers to the difficult questions health care providers ask every day: Where is the disease coming from? How will it spread? Where is the nearest hospital? What is the fastest route for the ambulance? Where should we allocate our funds. From conducting clinical field work in Kenya to constructing new hospitals in Sweden, health professionals use GIS to visualize and analyze geographic elements in every branch of health management. *ESRI Press, 2000.*

### Recent Journal Articles: GIS and Health

Joines JD, Hertz-Picciotto I, Carey TS, Gesler W, Suchindram C. (2003). A spatial analysis of county-level variation in hospitalization rates for low back problems in North Carolina. *Soc Sci Med* 56(12): 2541-53.

McLafferty SL (2003). GIS and Health Care. *Annu Rev Public Health*, 24:25-42.

Cromely EK (2003). GIS and disease. *Annu Rev Public Health* 24:7-24.

Stellman JM, Stellman SD, Weber T, Tomasallo C, Stellman AB, Christian R Jr. (2003). A geographic information system for characterizing exposure to Agent Orange and other herbicides in Vietnam. *Environ Health Perspect* 111(3):321-8.

Ricketts TC. (2003). Geographic information systems and public health. *Annu Rev Public Health* 24:1-6.

Lewis MD, Pavlin JA, Mansfield JL, O'Brien S, Boomsma LG, Elbert Y, Kelley PW (2002). Disease outbreak detection system using syndromic data in the greater Washington DC area. *Am J Prev Med*, 23(3):180-6.

Faruque FS, Lofton SP, Doddato TM, Mangum C. (2003). Utilizing geographic information systems in community assessment and nursing research. *Journal of Community Health Nursing*, 20(3):179-91.