

## **Pharmacy Manpower Project, Inc. Cumulative List of Resources for Pharmacist Workforce Data**

### **Data Sources:**

#### **Pharmacy Manpower Project, Inc.**

Aggregate Demand Index for Pharmacists

[www.pharmacymanpower.com](http://www.pharmacymanpower.com)

Supported by the Pharmacy Manpower Project, Inc., the Aggregate Demand Index uses data submitted by a panel of persons who participate in the hiring of pharmacists on a direct and regular basis to describe the severity of the pharmacist shortage at national and state levels. This panel represents the major geographical and practice sectors of pharmacy practice, including community, institutional and multiple.

Mott DA, Doucette WR, Gaither CA, et al. Final Report of the National Sample Survey of the Pharmacist Workforce to Determine Contemporary Demographic and Practice Characteristics. Alexandria, VA.: Pharmacy Manpower Project, Inc.; 2005.

<http://www.aacp.org/resources/research/pharmacymanpower/Pages/default.aspx>

The study, released in 2006, provides an update on the demographic and work characteristics of the pharmacist workforce in the U.S. during 2004. It also examines changes since 2000 when the last national assessment of the pharmacist workforce was conducted. The report sections are available online through AACP and LexisNexis.

Pedersen CA, Doucette WR, Gaither CA, et al. Final Report of the National Pharmacist Workforce Survey: 2000. Alexandria, VA.: Pharmacy Manpower Project, Inc. 2000.

<http://www.aacp.org/resources/research/pharmacymanpower/Pages/default.aspx>

A survey commissioned by the Pharmacy Manpower Project (PMP) of the supply and demand of pharmacists with the overall objective of obtaining reliable information on demographic and practice characteristics of the pharmacist workforce in the United States during 2000. The report sections are available online through AACP and LexisNexis.

### **Government:**

1. Bureau of Labor Statistics: <http://www.bls.gov>

The Bureau of Labor Statistics is the principle fact-finding agency for the Federal Government in the broad field of labor economics and statistics. Health care practitioner data is collected from employers in all industry sectors in metropolitan and non-metropolitan areas in every state. The BLS, with its growing number of occupational codes, provides comprehensive data related to pharmacists across a variety of practice sites. The 2004-05 BLS Occupational Outlook Handout <http://www.bls.gov/oco/oco079.htm> states that "Very good employment opportunities are expected for pharmacists over the 2002-12 period because the number of degrees granted in pharmacy is expected to be less than the number of job openings created by employment growth and the need to replace pharmacists who retire or otherwise leave the occupation. Recently, enrollments in pharmacy programs are rising as more students are attracted by high salaries and good job prospects. Despite this increase in enrollments, pharmacist jobs should still be more numerous than those seeking employment."

Pharmacists: <http://www.bls.gov/oes/current/oes291051.htm>

Pharmacy Technicians: <http://www.bls.gov/oes/current/oes292052.htm>

2. Bureau of Health Professions <http://bhpr.hrsa.gov/>

"The Pharmacist Workforce: A Study of Supply and Demand for Pharmacists," Department of Health and Human Services, Health Resources and Services Administration, Bureau of Health Professions, Washington DC (Dec, 2000). <http://bhpr.hrsa.gov/healthworkforce/reports/pharmacist.htm>

Supply and demand for pharmacists and their distribution is a relatively new concern for the public and Congress. In 1999, Congress directed the Department of Health and Human Services to conduct a study on pharmacist supply and demand, and the utilization of the contemporary pharmacist. Released in 2000, this study indicates that a shortage does exist and determines factors causing the shortage.

3. The Indian Health Service [www.pharmacy.ihs.gov/](http://www.pharmacy.ihs.gov/)

The Indian Health Service (IHS) utilizes pharmacists as mid-level practitioners. IHS offers a variety of student programs in multidisciplinary, progressive practice settings. IHS pharmacists are an integral part of health care delivery, and able to deliver a wide range of pharmaceutical care. The IHS employs over 450 pharmacists, and for several years the HIS has had a double digit vacancy rate for pharmacists. The IHS posts these vacancies and recruitment information on their website which is updated every two weeks.

4. United States Census Bureau, 5-Percent Public Use Microdata Sample (PUMS) Files

<http://www.census.gov/Press-Release/www/2003/PUMS5.html>

Information on how to acquire the data file. Cost is \$75 and comes on a DVD.

**Other Private:**

5. American Association of Colleges of Pharmacy: <http://www.aacp.org>

The American Association of Colleges of Pharmacy (AACP) website contains a large amount of historical data <http://www.aacp.org/RESOURCES/RESEARCH/INSTITUTIONALRESEARCH/Pages/default.aspx> collected annually from all member schools. Academic Pharmacy's Vital Statistics provides information on student, institution, and faculty demographics <http://www.aacp.org/about/Pages/Vitalstats.aspx>. AACP is aware of the significant challenges associated with the recruitment and retention of faculty <http://www.aacp.org/CAREER/FACULTYRECRUITMENT/Pages/default.aspx>.

6. American Pharmacist Association <http://www.pharmacist.com/>

The American Pharmacist Association provides comprehensive data on practicing pharmacists, and pharmacy practice settings. The Press kit offers a brief narrative on practicing pharmacist demographics.

[http://www.pharmacist.com/Content/NavigationMenu3/Newsroom/PublicRelationsResources/Media\\_Kit.htm](http://www.pharmacist.com/Content/NavigationMenu3/Newsroom/PublicRelationsResources/Media_Kit.htm)

7. The Pharmacy Technician Certification Board [www.ptcb.org](http://www.ptcb.org)

The Pharmacy Technician Certification Board (PTCB) offers estimates on the current number of registered pharmacy technicians.

<https://www.ptcb.org/AM/Template.cfm?Section=Regulations&Template=/CM/ContentDisplay.cfm&ContentID=3095>

8. National Association of Boards of Pharmacy [www.nabp.net](http://www.nabp.net)

The National Association of Boards of Pharmacy (NABP) provides information on licensure and the total number of licensed pharmacists. The official list of licensed pharmacists as provided by those states that participate in NABP's State Newsletter Program is available on the NABP website. NABP also provides a current pharmacist to technician ratio.

9. Medical Marketing Service, Inc. [www.mmslists.com](http://www.mmslists.com)

Medical Marketing Services, Inc. provides medical industry mailing lists. Mailing lists are obtained from the following organizations: American Pharmacist Association (APhA), American Society of Health System Pharmacists (ASHP), National Council for Prescription Drug Programs (NCPDP), and American College of Clinical Pharmacy (ACCP).

10. The American Hospital Association (AHA) <http://www.aha.org/aha/index.jsp>

The AHA's 2001 and 2002 reports <http://www.aha.org/aha/issues/Workforce/resources.html> corroborate findings in other reports that the demand for pharmacists creates vacancy rates within health systems that create unacceptable risk to patients. Their workforce analysis provides urban and rural comparative data.

11. Association of American Medical Colleges (AAMC) <http://www.aamc.org>

The AAMC report *Diversity in the Physician Workforce: Facts and Figures 2006* provides physicians, medical students, faculty, administrators, researchers and policy makers with a compendium of detailed statistical information on the demographics and practice patterns of the physician workforce that graduated from US allopathic Medical schools between 1950 and 2004. The publication is available on the AAMC's Web site at <http://www.aamc.org/factsandfigures>

## **Education (Research Centers):**

12. The University of California at San Francisco Center for Health Professions  
<http://www.futurehealth.ucsf.edu>

The Center for Health Professions conducts programs and projects that address the challenges faced by the health care workforce. Issues addressed include supply and distribution; skills and training; cultural competency and diversity; and leadership. Workforce issues in pharmacy, both in California and the entire US, is an issue addressed by the Center. Reports published by the Center recognize continuing demand exceeding supply, and the wide range of career options for contemporary pharmacists.

13. University of North Carolina at Chapel Hill Cecil B. Sheps Center for Health Services Research  
<http://www.schsr.unc.edu>

The Cecil B. Sheps Center for HSR seeks to improve health by understanding the problems, issues and alternatives in the design and delivery of health care services. Issues addressed by the center include accessibility, adequacy, organization, cost and effectiveness, and dissemination of information to policy makers and the public. Reports published by the center identify imbalance and potential shortages in the pharmacy workforce.

14. The Oregon Health and Sciences University Area Health Education Center  
<http://www.ohsu.edu/ahec/>

The Oregon Health and Sciences University Area Health Education Center Workforce Project, a demonstration project funded by the Northwest Health Foundation, was developed to test the feasibility of conducting comprehensive, coordinated surveys of Oregon's licensed health professionals. In 2000, the Oregon Area Health Education Centers Program, in conjunction with key stakeholders representing a variety of constituencies interested in issues surrounding Oregon's health workforce, conducted a survey of more than 25,000 health care providers. Pharmacists were included in the 200 survey.

## **Literature Related to Pharmacy Workforce:**

“Pharmacist Workforce 2002: A Sourcebook” Oregon Health Workforce Project. Portland. 2002  
Accessible at: [http://www.ohsu.edu/ahec/research/Ph\\_2002\\_final.pdf](http://www.ohsu.edu/ahec/research/Ph_2002_final.pdf)

McRee, Tina. “Pharmacy Staffing: A silent but critical concern”. UCSF Center for Health Professions, July 2002.  
Accessible at: [http://futurehealth.ucsf.edu/pdf\\_files/pharmacistIB.pdf](http://futurehealth.ucsf.edu/pdf_files/pharmacistIB.pdf)

Fraher EP, Smith LM, Dyson S, and Rickkett TC. “The Pharmacist Workforce in North Carolina” Cecil G. Sheps Center for Health Services Research. University of North Carolina at Chapel Hill. August 2002.  
Accessible at: <http://www.shepscenter.unc.edu/data/nchpds/pharmacy.pdf>

ASHP. “Report of the ASHP Task Force on Pharmacy’s Changing Demographics.” Am J Health-Syst Pharm. Jun 15, 2007. Accessible at: [http://www.ashp.org/s\\_ashp/docs/files/practice\\_and\\_policy/workforce/1311.pdf](http://www.ashp.org/s_ashp/docs/files/practice_and_policy/workforce/1311.pdf)

## **Other Health Professions’ Workforce Shortages Resources:**

The Princeton Conference: Health Care Workforce Issues of the 21st Century, hosted annually. The Council on Health Care Economics and Policy, with the Robert Wood Johnson Foundation, addressed health care workforce shortages at the annual Princeton Conference. Conference participants and presenters used new data to stimulate discussion on building a sustainable workforce, particularly the physician and nursing populations. Materials from the conference are available at: <http://council.brandeis.edu/>