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## Nursing Shortage Fact Sheet

The United States is in the midst of a nursing shortage that is expected to intensify as baby boomers age and the need for health care grows. Compounding the problem is the fact that nursing colleges and universities across the country are struggling to expand enrollment levels to meet the rising demand for nursing care.

The **American Association of Colleges of Nursing (AACN)** is concerned about the nursing shortage and is working with schools, policy makers, kindred organizations, and the media to bring attention to this health care crisis. AACN is working to enact legislation, identify strategies, and form collaborations to address the nursing shortage. To keep stakeholders abreast of current statistics related to the shortage, this fact sheet has been developed along with a companion Web resource: [www.aacn.nche.edu/Media/shortageresource.htm](http://www.aacn.nche.edu/Media/shortageresource.htm).

### Current and Projected Shortage Indicators

- According to the latest projections from the U.S. Bureau of Labor Statistics published in the February 2004 *Monthly Labor Review*, more than one million new and replacement nurses will be needed by 2012. For the first time, the U.S. Department of Labor has identified Registered Nursing as the top occupation in terms of job growth through the year 2012. [www.bls.gov/news.release/ecopro.toc.htm](http://www.bls.gov/news.release/ecopro.toc.htm)
- According to a July 2002 report by the Health Resources and Services Administration, 30 states were estimated to have shortages of registered nurses (RNs) in the year 2000. The shortage is projected to intensify over the next two decades with 44 states plus the District of Columbia expected to have RN shortages by the year 2020. The report, *Projected Supply, Demand, and Shortages of Registered Nurses: 2000-2020*, is available online at <http://bhpr.hrsa.gov/healthworkforce/reports/rnproject/default.htm>
- According to the National Council of State Boards of Nursing, the number of first-time, U.S. educated nursing school graduates who sat for the NCLEX-RN®, the national licensure examination for registered nurses, decreased by 10% from 1995-2004. A total of 9,353 fewer students in this category of test takers sat for the exam in 2004 as compared with 1995. [www.ncsbn.org](http://www.ncsbn.org)

<b>Number of Candidates Taking the NCLEX-RN® Exam First-Time, U.S. Educated Candidates Only</b>										
<b>Program</b>	<b>1995</b>	<b>1996</b>	<b>1997</b>	<b>1998</b>	<b>1999</b>	<b>2000</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>
<i>Diploma</i>	7,335	6,346	5,240	3,978	3,161	2,679	2,310	2,424	2,565	3,162
<i>Baccalaureate</i>	31,195	32,278	31,828	30,142	28,107	26,048	24,832	25,806	26,630	30,648
<i>Associates</i>	57,908	55,554	52,396	49,045	45,255	42,665	41,567	42,310	47,423	53,275
<b>Total</b>	96,438	94,178	89,464	83,165	76,523	71,392	68,709	70,540	76,618	87,085

- In March 2005, the Bernard Hodes Group released the results of a national poll of 138 health care recruiters to determine turnover rates, cost-per-hire and vacancy rates for a range of health care professionals, including registered nurses. The survey found that the average RN turnover rate was 13.9%, the vacancy rate was 16.1% and the average RN cost-per-hire was \$2,821. [www.hodes.com](http://www.hodes.com)
- According to a report published in November 2004 as a Web exclusive of *Health Affairs*, Dr. Peter Buerhaus and colleagues found that “despite the increase in employment of nearly 185,000 hospital RNs since 2001, there is no empirical evidence that the nursing shortage has ended. To the contrary, national surveys of RNs and physicians conducted in 2004 found that a clear majority of RNs (82%) and doctors (81%) perceived shortages where they worked.” <http://www.healthaffairs.org>
- According to American Hospital Association’s June 2001 *TrendWatch*, 126,000 nurses are needed now to fill vacancies at our nation’s hospitals. Today, fully 75% of all hospital vacancies are for nurses. [www.aha.org](http://www.aha.org)

## **Contributing Factors Impacting the Nursing Shortage**

### **Enrollment in schools of nursing is not growing fast enough to meet the projected demand for nurses over the next ten years.**

Though AACN reported a 14.1% enrollment increase in entry-level baccalaureate programs in nursing in 2004 over the previous year, this increase is not sufficient to meet the projected demand for nurses. In a report published in the November/December 2003 issue of *Health Affairs*, Dr. Peter Buerhaus and his colleagues found that “because the number of young RNs has decreased so dramatically over the past two decades, enrollments of young people in nursing programs would have to increase at least 40 percent annually to replace those expected to leave the workforce through retirement.” [www.healthaffairs.org](http://www.healthaffairs.org)

### **A shortage of nursing school faculty is restricting nursing program enrollments.**

- According to AACN’s report on *2004-2005 Enrollment and Graduations in Baccalaureate and Graduate Programs in Nursing*, U.S. nursing schools turned away 32,797 qualified applicants from baccalaureate and graduate nursing programs in 2004 due to insufficient number of faculty, clinical sites, classroom space, clinical preceptors, and budget constraints. Three quarters (76.1%) of the nursing schools responding to the 2004 survey pointed to faculty shortages as a reason for not accepting all qualified applicants into nursing programs. [www.aacn.nche.edu/IDS](http://www.aacn.nche.edu/IDS)
- According to a study released by the Southern Regional Board of Education (SREB) in February 2002, a serious shortage of nursing faculty was documented in 16 SREB states and the District of Columbia. Survey findings show that the combination of faculty vacancies (432) and newly budgeted positions (350) points to a 12% shortfall in the number of nurse educators needed. Unfilled faculty positions, resignations, projected retirements, and the shortage of students being prepared for the faculty role pose a threat to the nursing education workforce over the next five years. [www.sreb.org](http://www.sreb.org)

### **With fewer new nurses entering the profession, the average age of the RN is climbing.**

- According to the *National Sample Survey of Registered Nurses* released in February 2002 by the Division of Nursing within the Bureau of Health Professions, the average age of the working registered nurse was 43.3 in March 2000, up from 42.3 in 1996. The RN population under the age of 30 dropped from 25.1% of the nursing population in 1980 to 9.1% in 2000. <http://bhpr.hrsa.gov/healthworkforce/reports/rnsurvey>

- According to a July 2001 report released by the Government Accounting Office, *Nursing Workforce: Emerging Nurse Shortages Due to Multiple Factors* (GAO-01-944), 40% of all RNs will be older than age 50 by the year 2010. [www.gao.gov](http://www.gao.gov)

### **The total population of registered nurses is growing at the slowest rate in 20 years.**

According to the latest *The National Sample Survey of Registered Nurses*, the total RN population has increased at every 4-year interval in which the survey has been taken since 1980. Although the total RN population increased from 2,558,874 in 1996 to 2,696,540 in 2000, it was the lowest increase (5.4%) reported since the survey began in 1980. Of the total RN population in 2000, an estimated 58.5% work full-time in nursing, 23.2% work part-time, and 18.3% are not employed in nursing.

<http://bhpr.hrsa.gov/healthworkforce/reports/rnsurvey>

### **Changing demographics signal a need for more nurses to care for our aging population.**

- According to the July 2001 report, *Nursing Workforce: Emerging Nurse Shortages Due to Multiple Factors* (GAO-01-944), “a serious shortage of nurses is expected in the future as demographic pressures influence both supply and demand. The future demand for nurses is expected to increase dramatically as the baby boomers reach their 60s, 70s, and beyond.” [www.gao.gov](http://www.gao.gov)
- According to a May 2001 report, *Who Will Care for Each of Us?: America’s Coming Health Care Crisis*, released by the Nursing Institute at the University of Illinois College of Nursing, the ratio of potential caregivers to the people most likely to need care, the elderly population, will decrease by 40% between 2010 and 2030. Demographic changes may limit access to health care unless the number of nurses and other caregivers grows in proportion to the rising elderly population. [www.kaisernetwork.org/healthcast/nursing/may01](http://www.kaisernetwork.org/healthcast/nursing/may01)

### **Job burnout and dissatisfaction are driving nurses to leave the profession.**

- In the March-April 2005 issue of *Nursing Economic\$*, Dr. Peter Buerhaus and colleagues found that more than 75% of RNs believe the nursing shortage presents a major problem for the quality of their work life, the quality of patient care, and the amount of time nurses can spend with patients. Looking forward, almost all surveyed nurses see the shortage in the future as a catalyst for increasing stress on nurses (98%), lowering patient care quality (93%) and causing nurses to leave the profession (93%). [www.ajj.com/services/pblshng/nej/nejmain.htm](http://www.ajj.com/services/pblshng/nej/nejmain.htm)
- According to a study in the October 2002 *Journal of the American Medical Association*, nurses reported greater job dissatisfaction and emotional exhaustion when they were responsible for more patients than they can safely care for. Researcher Dr. Linda Aiken concluded that “failure to retain nurses contributes to avoidable patient deaths.” [www.nursing.upenn.edu/news/detail.asp?t=2&id=23](http://www.nursing.upenn.edu/news/detail.asp?t=2&id=23)
- According to a study published by Dr. Linda Aiken and colleagues in the May/June 2001 issue of *Health Affairs*, more than 40% of nurses working in hospitals reported being dissatisfied with their jobs. The study indicates that 1 out of every 3 hospital nurses under the age of 30 are planning to leave their current job in the next year. [www.healthaffairs.org](http://www.healthaffairs.org)

### **High nurse turnover and vacancy rates are affecting access to health care.**

- In December 2004, hospital CEOs identified “Personnel Shortages” as their leading concern according to the American College of Healthcare Executives’ survey on the Top Issues Confronting Hospitals: 2004. Among all personnel shortages, 87% of hospital executives cited the shortage of registered nurses as their top staffing concern. [www.ache.org/PUBS/Research/ceoissues.cfm](http://www.ache.org/PUBS/Research/ceoissues.cfm)

- The American College of Healthcare Executives reported in October 2004 that 72% of hospital CEOs were experiencing a nursing shortage at their facilities. The American Society for Healthcare Human Resources Administration reported that though the time to fill registered nurse vacancies at small to medium facilities decreased by 18% in 2003, the average time to fill RN vacancies increased from 60 to 61 days this year. <http://www.ache.org> and <http://www.ashhra.org>
- According to a February 2002 report on health workforce shortages prepared by First Consulting Group for the American Hospital Association and other trade groups, the average nurse vacancy rate in U.S. hospitals was 13%. Over one in seven hospitals reported a severe RN vacancy rate of more than 20%. High vacancy rates were measured across rural and urban settings and in all regions of the country. Survey respondents indicated that a shortage of personnel is contributing to emergency department overcrowding and ambulance diversions. [www.aha.org](http://www.aha.org)
- According to the report *Acute Care Hospital Survey of RN Vacancies and Turnover Rates in 2000* released in January 2002 by the American Organization of Nurse Executives, the average RN turnover rate in acute care hospitals was 21.3%. The average nurse vacancy rate was 10.2% with the highest rates found in critical care units (14.6%) and medical-surgical care (14.1%). Nurse executives surveyed indicated that staffing shortages are contributing to emergency department overcrowding (51%) and the need to close beds (25%). [www.aone.org](http://www.aone.org)

## **Impact of Nurse Staffing on Patient Care**

### **Many recent studies point to the connection between adequate levels of registered nurse staffing and safe patient care.**

- In November 2004, results from the National Survey on Consumers' Experiences with Patient Safety and Quality Information were released and found that 40% of Americans think the quality of health care has worsened in the last five years. Consumers reported that the most important issues affecting medical error rates are workload, stress or fatigue among health professionals (74%); too little time spent with patients (70%); and too few nurses (69%). This survey was sponsored by the Kaiser Family Foundation, the Agency for Healthcare Research and Quality and the Harvard School of Public Health. [www.kff.org/kaiserpolls/pomr111704pkg.cfm](http://www.kff.org/kaiserpolls/pomr111704pkg.cfm)
- In March 2004, the Agency for Healthcare Research and Quality (AHRQ) issued a synthesis of nursing research studies that details the impact that staffing levels, staff mix, and education levels have on patient outcomes. The report, titled *Research in Action: Hospital Nurse Staffing and Availability of Care*, cited studies showing that hospitals with lower nurse staffing levels and fewer registered nurses compared with licensed practical nurses or nurses' aides tend to have higher rates of poor patient outcomes. [www.ahrq.gov/research/nursestaffing/nursestaff.htm](http://www.ahrq.gov/research/nursestaffing/nursestaff.htm)
- A shortage of nurses prepared at the baccalaureate level may be affecting health care quality and patient outcomes. In a study published in the September 24, 2003 issue of the *Journal of the American Medical Association* (JAMA), Dr. Linda Aiken and her colleagues at the University of Pennsylvania identified a clear link between higher levels of nursing education and better patient outcomes. This extensive study found that surgical patients have a "substantial survival advantage" if treated in hospitals with higher proportions of nurses educated at the baccalaureate or higher degree level. In hospitals, a 10 percent increase in the proportion of nurses holding BSN degrees decreased the risk of patient death and failure to rescue by 5 percent. <http://jama.ama-assn.org>

- A survey reported in the December 12, 2002 issue of the *New England Journal of Medicine* found that 53% of physicians and 65% of the public cited the shortage of nurses as a leading cause of medical errors. Overall, 42% of the public and more than a third of U.S. doctors reported that they or their family members have experienced medical errors in the course of receiving medical care.  
*<http://content.nejm.org>*
- According to a study published in the October 23/30, 2002 issue of the *Journal of the American Medical Association*, more nurses at the bedside could save thousands of patient lives each year. Nurse researchers at the University of Pennsylvania determined that patients who have common surgeries in hospitals with high nurse-to-patient ratios have an up to 31% increased chance of dying. Funded by the National Institute for Nursing Research, the study found that every additional patient in an average hospital nurse's workload increased the risk of death in surgical patients by 7%. Having too few nurses may actually cost more money given the high costs of replacing burnt-out nurses and caring for patients with poor outcomes. *[www.nursing.upenn.edu/news/detail.asp?t=2&id=23](http://www.nursing.upenn.edu/news/detail.asp?t=2&id=23)*
- In *Health Care at the Crossroads: Strategies for Addressing the Evolving Nursing Crisis*, a report released in August 2002 by the Joint Commission on Accreditation of Healthcare Organizations (JCAHO), the authors found that a shortage of nurses in America's hospitals is putting patient lives in danger. JCAHO examined 1609 hospital reports of patient deaths and injuries since 1996 and found that low nursing staff levels were a contributing factor in 24% of the cases. *[www.jcaho.org](http://www.jcaho.org)*
- According to a study published in the *New England Journal of Medicine* in May 2002, a higher proportion of nursing care provided by RNs and a greater number of hours of care by RNs per day are associated with better outcomes for hospitalized patients. This extensive study was conducted by Drs. Jack Needleman and Peter Buerhaus. *<http://content.nejm.org>*

## Strategies to Address the Nursing Shortage

- In July 2005, Reps. Nita Lowey (D-NY), Peter King (R-NY), and Lois Capps (D-CA), introduced the Nurse Education, Expansion and Development (NEED) Act (H.R. 3569) to assist schools of nursing in increasing the number of students and faculty. The bill calls for capitation grants for schools to hire new and retain current faculty, purchase educational equipment, enhance audiovisual and clinical laboratories, expand infrastructure, or recruit students. Sens. Jeff Bingaman (D-NM) and John Cornyn (R-TX) also introduced the Nurse Faculty Education Act (S. 1575) to increase the number of doctorally-prepared nurses serving as faculty. Grant funding would be used by schools to hire new or retain existing faculty, purchase educational resources, and support transition into the faculty role.  
*[www.aacn.nche.edu/Government](http://www.aacn.nche.edu/Government)*
- In June 2005, the U.S. Department of Labor (DOL) awarded more than \$12 million in grant-funding through the **President's High Growth Job Training Initiative**, \$3 million of which will help to address the nurse faculty shortage. This latest round of funding brings the DOL's commitment to health care workforce through the High-Growth program to more than \$43 million. Details on all grant-funded programs are posted on the Web. *[www.doleta.gov/BRG/Indprof/Health.cfm](http://www.doleta.gov/BRG/Indprof/Health.cfm)*.
- In 2002, the **Nurse Reinvestment Act** (P.L. 107-205) expanded existing law in Nursing Workforce Development (Title VIII, Public Health Service Act) to create new and expanded programs targeted to resolving the nursing shortage. Every year Congress must fund these programs through the appropriations process to maintain or expand the Nurse Faculty Loan Program, Nurse Scholarship Program, and other critical nursing education programs.  
*[www.aacn.nche.edu/Media/shortageresource.htm#legislation](http://www.aacn.nche.edu/Media/shortageresource.htm#legislation)*

- Two national media campaigns have been launched to help polish the image of nursing. ***Nurses for a Healthier Tomorrow*** is a coalition of 44 nursing and health care organizations working together to raise interest in nursing careers among middle and high school students. The coalition has conducted nationwide focus groups with students ages 6-15 years; secured over \$600,000 in sponsorship; launched a Web site; created a televised public service announcement, and designed print ads that can be downloaded for free from the Web. In February 2002, Johnson & Johnson launched the ***Campaign for Nursing's Future***, a multimedia initiative to promote careers in nursing that includes paid television commercials, a recruitment video, a Web site, and brochures, and other visuals. [www.nursesource.org](http://www.nursesource.org) and [www.discovernursing.com](http://www.discovernursing.com)
- The **Call to the Profession** is a group of top leaders from national nursing organizations who are working together to ensure safe, quality nursing care for consumers and a sufficient supply of registered nurses to deliver that care. The group released an action plan called Nursing's Agenda for the Future in April 2002. [www.ana.org](http://www.ana.org)
- The **TriCouncil for Nursing**, an alliance of four autonomous nursing organizations (AACN, ANA, AONE, NLN) each focused on leadership for education, practice and research, issued a joint policy statement in January 2001 on *Strategies to Reverse the New Nursing Shortage*. [www.aacn.nche.edu/Publications/positions/tricshortage.htm](http://www.aacn.nche.edu/Publications/positions/tricshortage.htm)

*The American Association of Colleges of Nursing is the national voice for university and four-year-college education programs in nursing. Representing more than 585 member schools of nursing at public and private institutions nationwide, AACN's educational, research, governmental advocacy, data collection, publications, and other programs work to establish quality standards for bachelor's- and graduate-degree nursing education, assist deans and directors to implement those standards, influence the nursing profession to improve health care, and promote public support of baccalaureate and graduate nursing education, research, and practice.*

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