

Fact Sheet:

Nursing Shortage

The U.S. is projected to experience a shortage of Registered Nurses (RNs) that is expected to intensify as Baby Boomers age and the need for health care grows. Compounding the problem is the fact that nursing schools across the country are struggling to expand capacity to meet the rising demand for care. The American Association of Colleges of Nursing (AACN) is working with schools, policy makers, nursing organizations, and the media to bring attention to this healthcare concern. AACN is leveraging its resources to shape legislation, identify strategies, and form collaborations to address the shortage.

Current and Projected Shortage Indicators

- According to the Bureau of Labor Statistics' [Employment Projections 2022-2032](#), the Registered Nursing (RN) workforce is expected to expand by 6% over the next decade. The RN workforce is anticipated to grow from 3.1 million in 2022 to 3.3 million in 2032, an increase of 177,440 nurses. The Bureau also projects 193,100 openings for RNs each year through 2032 when nurse retirements and workforce exits are factored into the number of nurses needed in the U.S.
- The Advanced Practice Registered Nurse (APRN) workforce, including Nurse Practitioners, Nurse Anesthetists, and Nurse Midwives, is expected to grow much faster than average for all occupations, by 38% from 2022 through 2032, according to the [BLS' Occupational Outlook Handbook](#). Approximately 29,200 new APRNs, which are prepared in master's and doctoral programs, will be needed each year through 2032 to meet the rising demand for primary and specialty care.
- According to a [Health Workforce Analysis](#) published by the Health Resources and Services Administration (HRSA) in November 2022, federal authorities project a shortage of 78,610 full-time RNs in 2025 and a shortage of 63,720 full-time RNs in 2030. The ten states with the largest projected nursing shortage in 2035 are

Washington (26%), Georgia (21%), California (18%), Oregon (16%), Michigan (15%), Idaho (15%), Louisiana (13%), North Carolina (13%), New Jersey (12%), and South Carolina (11%). Data for each state may be accessed through HRSA's [Workforce Projections Dashboard](#).

- In April 2022, Dr. David Auerbach and colleagues [published a nursing workforce analysis](#) in *Health Affairs*, which found that total supply of RNs decreased by more than 100,000 from 2020 to 2021 – the largest drop than ever observed over the past four decades. A significant number of nurses who left the workforce were under the age of 35, and most were employed in hospitals.
- The Institute of Medicine in its landmark report on [The Future of Nursing](#) called for increasing the number of baccalaureate-prepared nurses in the workforce to at least 80% to enhance patient safety. The current nursing workforce falls short of this recommendation, though more than two-thirds of RNs are educated at the baccalaureate or graduate level. The exact percentage has been reported as 69% by [HRSA](#) and 71.7% by the [National Council of State Boards of Nursing](#).
- In March 2023, the International Council of Nurses (ICN) released a report calling for the worldwide shortage of nurses to be treated as a global health emergency. The report, titled [Recover to Rebuild: Investing in the Nursing Workforce for Health System Effectiveness](#), details the impact that the pandemic had on the world's nursing workforce, nurse burnout, and access to care. The authors call for protecting and investing in nurses as key to health system recovery.

Contributing Factors Impacting the Nursing Shortage

Nursing school enrollment is not growing fast enough to meet the projected demand for RN and APRN services.

Though enrollment in entry-level baccalaureate programs in nursing increased by 0.3% in 2023, AACN did report drops in both PhD and master's nursing programs by 3.1% and 0.9%, respectively. These trends are raising concerns about the capacity of nursing schools to meet the projected demand for nursing services, including the need for more nurse faculty, researchers, and primary care providers.

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

- According to AACN's report on [2023-2024 Enrollment and Graduations in Baccalaureate and Graduate Programs in Nursing](#), U.S. nursing schools turned away 65,766 qualified applications (not applicants) from baccalaureate and graduate nursing programs in 2023

due to insufficient number of faculty, clinical sites, classroom space, and clinical preceptors, as well as budget constraints.

- According to a [Special Survey on Vacant Faculty Positions](#) released by AACN in October 2023, a total of 1,977 full-time faculty vacancies were identified in a survey of 922 nursing schools with baccalaureate and/or graduate programs across the country (84.6% response rate). Besides the vacancies, schools cited the need to create an additional 103 faculty positions to accommodate student demand. The data show a national nurse faculty vacancy rate of 7.8%. Most of the vacancies (79.8%) were faculty positions requiring or preferring a doctoral degree.

A significant segment of the nursing workforce is nearing retirement age.

- According to the [2022 National Sample Survey of Registered Nurses](#), 23% of RNs working in outpatient, ambulatory, and clinical settings have retired or plan to retire over the next 5 years. While hospitals had the lowest share of nurses who have retired or plan to retire over the next 5 years (15.1%), nurses employed in this setting had the lowest levels of job satisfaction.
- Published October 4, 2023, by the *Journal of the American Medical Association*, Dr. Melissa Suran published an article titled [Overworked and Understaffed, More Than 1 in 4 US Nurses Say They Plan to Leave the Profession](#). The author looks at the latest data on nurses' intent to leave their positions and how burnout and understaffing are impacting the workforce.
- In a [Health Affairs blog](#) posted in May 2017, Dr. Peter Buerhaus and colleagues project that more than 1 million registered nurses will retire from the workforce by 2030.

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

- The [U.S. Census Bureau](#) reported that number of Americans aged 65 and older is projected to increase from 58 million in 2022 to 82 million by 2050 (23% of the population). With larger numbers of older adults, there will be an increased need for geriatric care, including care for individuals with chronic diseases and comorbidities.

Amplified by the pandemic, insufficient staffing is raising the stress level of nurses, impacting job satisfaction, and driving many nurses to leave the profession.

- According to data published in Nurse.com's [2022 Nurse Salary Research Report](#), 29% of nurses across all license types considered leaving in 2021, compared with 11% in 2020. Among nurses who are considering leaving the profession, higher pay was the most influential motivation to stay, followed by better support for work-life balance and more reasonable workload.
- In March 2022, the American Nurses Foundation and the American Nurses Association released the results of its [COVID-19 Impact Assessment Survey](#), which found that 52% of nurses are considering leaving their current position due primarily to insufficient staffing, work negatively affecting health and well-being, and inability to deliver quality care. In addition, 60% of acute care nurses report feeling burnt out, and 75% report feeling stressed, frustrated, and exhausted.
- In September 2021, the American Association of Critical-Care Nurses reported [survey findings](#) which show 66% of acute care nurses have considered leaving nursing after their experiences during the pandemic.

Impact of Nurse Staffing on Patient Care

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

- In November 2021, new research in *Nursing Outlook* examined [Variations in Nursing Baccalaureate Education and 30-day Inpatient Surgical Mortality](#). Researchers found that having a higher proportion of baccalaureate-prepared nurses (BSN) in hospital settings, regardless of educational pathway, is associated with lower rates of 30-day inpatient surgical mortality. The findings support promoting multiple BSN educational pathways.
- In the July 2017 issue of *BMJ Quality & Safety*, the international journal of healthcare improvement, Dr. Linda Aiken and her colleagues released [findings from a study of acute care hospitals](#) in Belgium, England, Finland, Ireland, Spain, and Switzerland, which found that a greater proportion of professional nurses at the bedside is associated with better outcomes for patients and nurses. Reducing nursing skill mix by adding assistive personnel without professional nurse qualifications may contribute to preventable deaths, erode care quality, and contribute to nurse shortages.
- In a [study](#) published in the journal *BMJ Quality & Safety* in May 2013, researcher Heather L. Tubbs-Cooley and colleagues observed that higher patient loads were

associated with higher hospital readmission rates. The study found that when more than four patients were assigned to an RN in pediatric hospitals, the likelihood of hospital readmissions increased significantly.

- In the August 2012 issue of the *American Journal of Infection Control*, Dr. Jeannie Cimiotti and colleagues identified a significant association between high patient-to-nurse ratios and nurse burnout with increased urinary tract and surgical site infections. In this [study of Pennsylvania hospitals](#), the researchers found that increasing a nurse's patient load by just one patient was associated with higher rates of infection. The authors conclude that reducing nurse burnout can improve both the well-being of nurses and the quality of patient care.
- In a [study](#) published in the April 2011 issue of *Medical Care*, Dr. Mary Blegen and her colleagues from the University of California, San Francisco found that higher nurse staffing levels were associated with fewer deaths, lower failure-to-rescue incidents, lower rates of infection, and shorter hospital stays.
- In March 2011, Dr. Jack Needleman and colleagues published findings in the *New England Journal of Medicine*, which indicate that insufficient nurse staffing was related to higher patient mortality rates. These researchers analyzed the records of nearly 198,000 admitted patients and 177,000 eight-hour nursing shifts across 43 patient-care units at large academic health centers. The data show that the mortality risk for patients was about 6% higher on units that were understaffed as compared with fully staffed units. In the study titled [Nurse Staffing and Inpatient Hospital Mortality](#), the researchers also found that when a nurse's workload increases because of high patient turnover, mortality risk also increases.
- A growing body of research clearly links baccalaureate-prepared nurses to lower mortality and failure-to-rescue rates. Studies published in the journals [Health Services Research](#) in August 2008 and the [Journal of Nursing Administration](#) in May 2008 confirm the findings of several previous studies which link education level and patient outcomes. Efforts to address the nursing shortage must focus on preparing more baccalaureate-prepared nurses in order to ensure access to safe patient care.
- In March 2007, a comprehensive report initiated by the Agency for Healthcare Research and Quality was released on *Nursing Staffing and Quality of Patient Care*. Through this meta-analysis, the authors found that the shortage of registered nurses, in combination with an increased workload, poses a potential threat to care quality. Increases in registered nurse staffing were associated with reductions in hospital-related mortality and failure to rescue rates as well as reduced length of stays.

- A shortage of nurses prepared at the baccalaureate level is affecting healthcare quality and patient outcomes. In [a study published September 24, 2003](#), in 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% increase in the proportion of nurses holding BSN degrees decreased the risk of patient death and failure to rescue by 5%.

Efforts to Address the Nursing Shortage

- AACN is committed to working with the higher education and healthcare community to prepare more highly educated nurses in sufficient numbers to meet the needs of the nation’s diverse patient population. To address the nursing shortage, AACN is advocating for federal legislation and increased funding for nursing education ([Title VIII, Future Advancement of Academic Nursing Act](#)); promoting a post-baccalaureate nurse residency program to aid in nurse retention; encouraging innovation in nursing programs, including the development of fast-track programs (second-degree BSN and MSN programs; baccalaureate to doctoral); and working with partner organizations to highlight careers in nursing, including those requiring graduate level preparation.
- Since 2010, AACN has operated [NursingCAS](#), the nation’s centralized application service for nursing education programs that prepare nurses for entry-level and advanced roles. One of the primary reasons for launching NursingCAS was to ensure that all vacant seats in schools of nursing are filled to better meet the nation’s need for RNs, APRNs, and nurse faculty.
- In June 2022, the National Council of State Legislatures issued a [brief](#) profiling different legislative approaches states are using to address the nursing shortage, including adapting scope of practice laws and offering financial incentives for preceptors.
- In a report on [How To Ease the Nursing Shortage in America](#) released in May 2022, the Center for American Progress calls for bold policies toward solving the nursing shortage to ensure that more patients with access to safe, high-quality nursing services. The report highlights how federal and state policymakers can address the shortage through coordinated planning, action, and investment.

- Many statewide initiatives are underway to address both the shortage of RNs and nurse educators. For example, in October 2022, the University of Minnesota and Minnesota State joined forces to create [Coalition for Nursing Equity and Excellence](#), which will work with every school of nursing in the state, healthcare providers, and others to increase enrollment in nurse education programs, expand equity in the nursing workforce, and increase student success. Additional initiatives are also underway in [Connecticut](#), [Florida](#), [Louisiana](#), [Missouri](#), and other states.
- Nursing schools are forming strategic partnerships and seeking private support to help expand student capacity. For example, [Shenandoah University](#) announced in March 2023 a new collaboration with Valley Health and the Virginia Hospital and Healthcare Association to address the region’s nursing shortage through a program that leverages retiring nurses and simulation to create a sustainable pathway into nursing. See also efforts launched by [Idaho State University](#) and Kootenai Health; [Illinois College](#) and Memorial Health; [Emory University](#) and the Georgia Nursing Leadership Coalition; [Washington State University](#) and Providence Health & Services; and the [University of Oklahoma](#) and area schools.

Recent Articles on the Nursing Shortage

Buerhaus, P.I., Staiger, D.O., Auerbach, D.I., Yates, C., & Donelan, K. (2022, January). [Nurse employment during the first fifteen months of the COVID-19 pandemic](#). *Health Affairs*, 41(1).

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Suran, M. (2023, October 23). [Overworked and Understaffed, More Than 1 in 4 US Nurses Say They Plan to Leave the Profession](#). *JAMA Medical News*, 330(16), 1512-1514.
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