

SPECIAL REPORT SERIES

A Longitudinal Assessment of Diversity in Indiana's Health Workforce



Indiana Pharmacists



SCHOOL OF MEDICINE
BOWEN CENTER FOR HEALTH
WORKFORCE RESEARCH & POLICY

TABLE OF CONTENTS

| | |
|--------------------------------|----------|
| EXECUTIVE SUMMARY | 2 |
| LONGITUDINAL TRENDS | 3 |
| POLICY IMPLICATIONS | 4 |
| DEMOGRAPHIC TRENDS | 5 |
| APPENDIX | 6 |
| ENDNOTES | 7 |
| ACKNOWLEDGMENTS | 8 |

EXECUTIVE SUMMARY

Within the health workforce, pharmacists are critical in preparing and providing medications to ensure patient health. Moreover, they ensure patient safety by offering guidance on the use of different medications. Pharmacists can work in multiple settings, making them an accessible source of health care. Because of this, it is important to ensure that the pharmacy workforce is culturally competent and representative of the increasingly diverse populations that they serve. This report gives an overview of historical data related to diversity of the pharmacist workforce in Indiana.

The Indiana Health Workforce Diversity Brief Series was established to present longitudinal trends in demographics and evaluate the status of diversity of Indiana's health workforce. This report, as part of the series, examines the demographic measures (gender, race, ethnicity, and age) of pharmacists. The data were collected directly from pharmacists during the license renewal periods between 2004-2022. For more information on the methodology used in this series, please see the first report of this series.

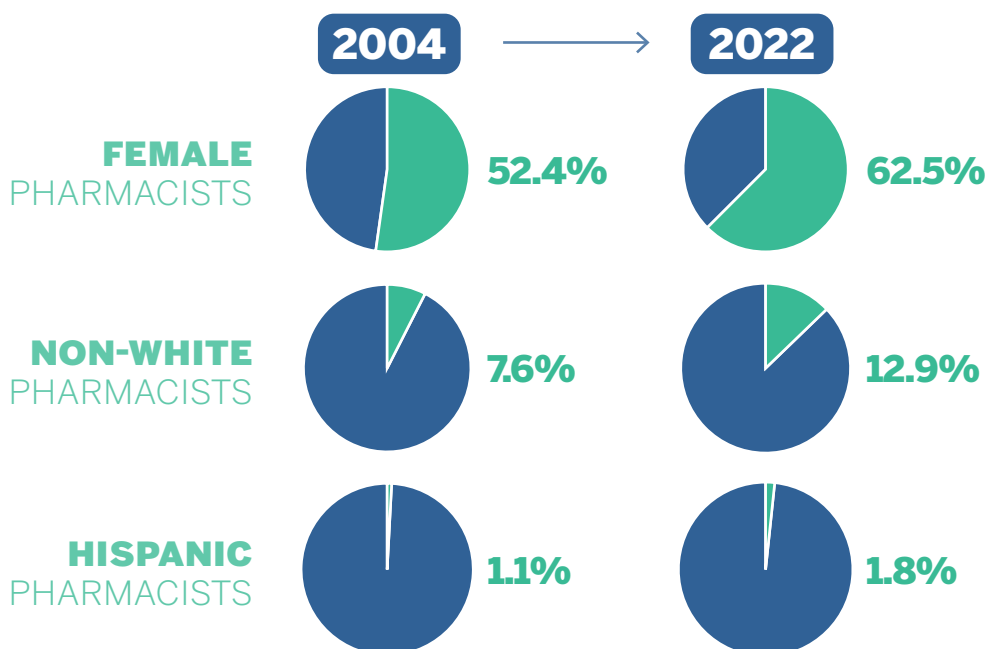
How is Underrepresented Minority Defined

According to the Bureau of Health Workforce - HRSA, an underrepresented minority is defined as, **“someone from a racial or ethnic group considered inadequately represented in a specific profession relative to the representation of that racial or ethnic group in the general population.”**

[Bureau of Health Workforce \(HRSA\). Glossary.](#)

Indiana's pharmacist workforce has become increasingly diverse over the past 18 years. The proportion of female pharmacists increased by 19.2%, non-White pharmacists by 69.7%, and those identifying as s Hispanic, Latino(a), or Spanish origin by 63.6%.

It is of particular interest to examine the policies and programs directly related to racial and ethnic diversity in the workforce that could potentially increase diversity in the health workforce altogether. A review of these policies and programs will enable identification of opportunities to better enhance diversity among Indiana's pharmacists to align with Indiana's population characteristics.



LONGITUDINAL TRENDS

The total number of pharmacists who reported actively practicing in Indiana has increased from 4,369 in 2004 to 6,029 in 2022. Over the years, the strategy used to identify Indiana's practicing pharmacists has been modified to align with changes in pharmacy services delivery and adjustments to the bi-annual license renewal supplemental survey. More information on these changes can be found in the Diversity Report: Methodology and Introduction¹.

Since 2004, the proportion of female pharmacists increased from 52.4% in 2004 to 62.5% in 2022. While there has been a slight decline in the proportion of pharmacists under 35 years old, the overall distribution has remained relatively stable.

Moreover, Indiana pharmacists are predominately White and Not of Hispanic, Latino/a, or Spanish origin. However, there has been a growth in both racial and ethnic diversity, with the proportion of pharmacists identifying as a racial minority increasing from 7.6% in 2004 to 12.9% in 2024. Significant increases were observed among Asian pharmacists. The proportion of pharmacists identifying as Hispanic, Latino/a, or Spanish increased incrementally from 1.1% in 2004 to 1.8% in 2022, and the representation of this ethnic group in Indiana's pharmacist's workforce has remained low.

POLICY IMPLICATIONS

While increased diversity in the pharmacist workforce may also be attributable to increased diversity in the U.S. population overall, there have also been national institutes and associations which have focused on commitments to cultivating diversity and harboring equitable work environments for pharmacists of all backgrounds. Perhaps the most relevant policies with a diversity focus are those by the American Pharmacist Association (APhA), American Association of College of Pharmacy (AACP), and the National Pharmaceutical Association (NPhA).

APhA leads the profession by supporting pharmacists, students, and pharmacy technicians in their role of optimizing medication use and patient health outcomesⁱⁱ. In 2020, APhA formed a Diversity, Equity, Inclusion and Belonging Committee tasked with addressing the issues of systematic racism, discrimination, injustice, and marginalization of individuals within the profession and communities that their members serveⁱⁱⁱ. Additionally, APhA formed a Task Force that produced a 2020-2023 Report on Addressing Structural Racism^{iv}. The report included the mission, core values, the task force charge, scope of work, and a vision statement. Additionally, the report summarized the organization's historical, current, and future work. Future work includes beginning to consider how best to address pharmacy's role in racism through the lens of social determinants of health and health inequities.

The AACP's mission is to advance pharmacy education, research, scholarship, practice and service, in partnership with members and stakeholders, to improve health for all. AACP has made diversity, equity, inclusion, and accessibility (DEIA) a priority by creating the AACP DEIA Committee in 2020. The Committee provides guidance, strategic recommendations for organizational activities that enhance the goals in diversity, equity, inclusion and anti-racism throughout the organization^v. The Committee's specific goals include identifying opportunities to engage the target audiences in DEIA activities and action steps, identifying and compiling a portfolio of resources, and disseminating information about relevant programs, initiatives, and events^{vi}.

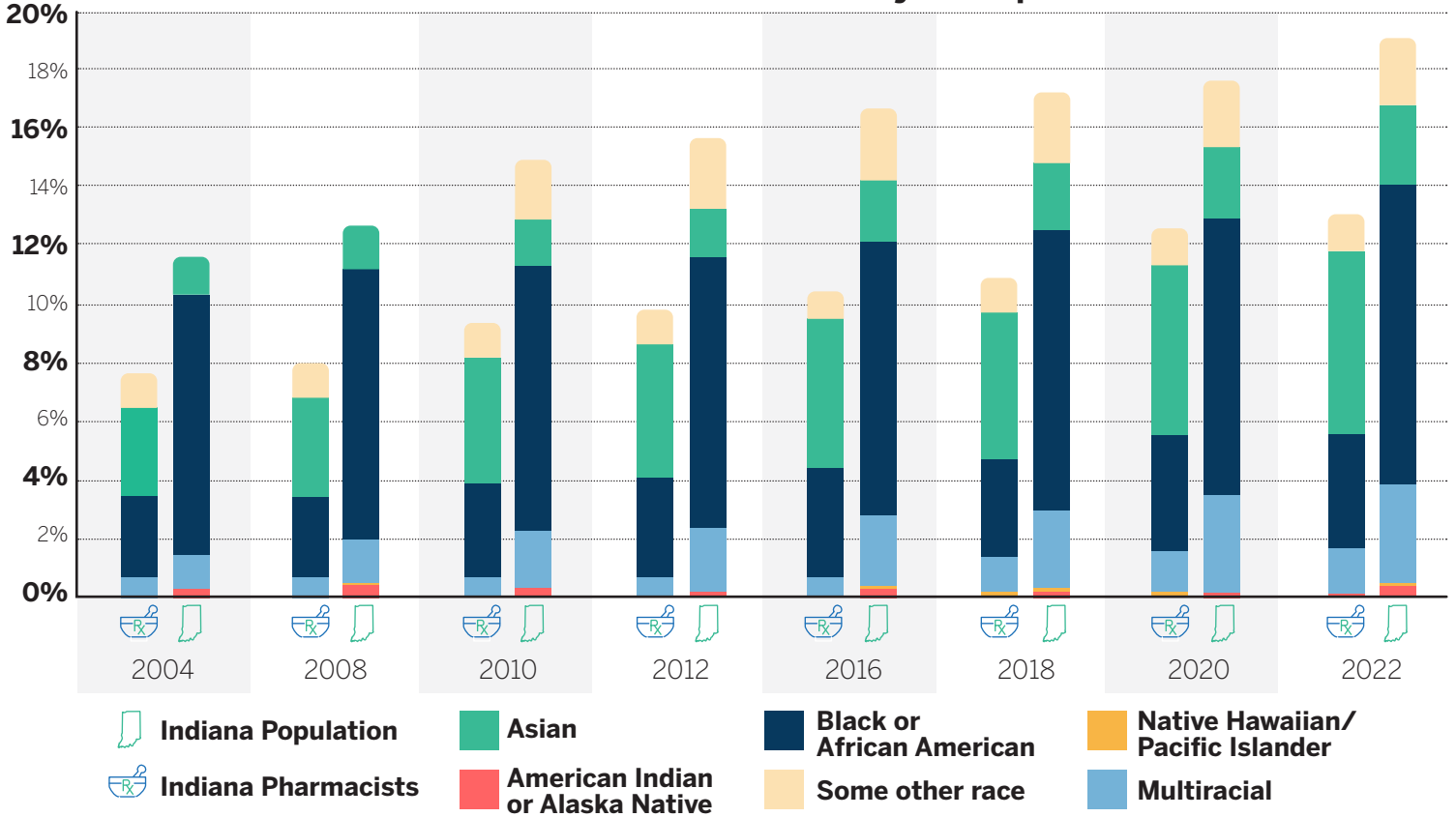
The NPhA is a national professional organization of pharmacists committed to serving the underserved and prompting minorities in pharmacy. Run by pharmacists of racial and ethnic minority groups, organization's mission is dedicated to representing the views and ideals of minority pharmacists on critical issues affecting healthcare and pharmacy, promoting racial and health equity, as well as advancing the standards of pharmaceutical care among all practitioners^{vii}. Membership offers the opportunity to network with pharmacists and students who are devoted to serving underserved communities. The organization strives to increase the number of minority pharmacists, raise money to provide scholarships for pharmacy students, and be a strong voice on issues affecting pharmacists in underserved communities.

In addition to the work of these professional organizations, the Health Resources and Services Administration's Bureau of Health Workforce offers loan repayment, scholarship, and educational programming to support the pharmacist workforce broadly. Although these programs do not specifically target diversity goals, they do generally support pharmacy professionals seeking to further their education and experience by working in underserved communities^{viii}. The Indiana Pharmacy Association offers a state-based scholarship program, called the Pharmacists Education Foundation, which grants one scholarship to one student from each of Indiana's three colleges of Pharmacy. These scholarships include the Joseph E. McSoley scholarship and Jeremy Thain scholarship^{ix}.

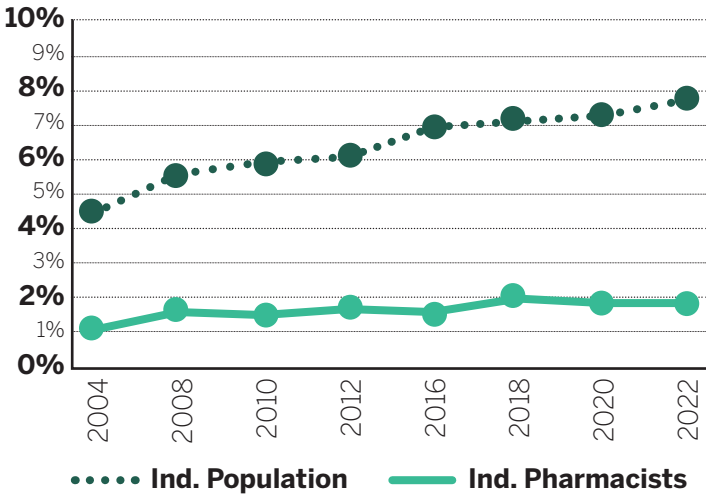


Indiana Pharmacist Demographic Trends

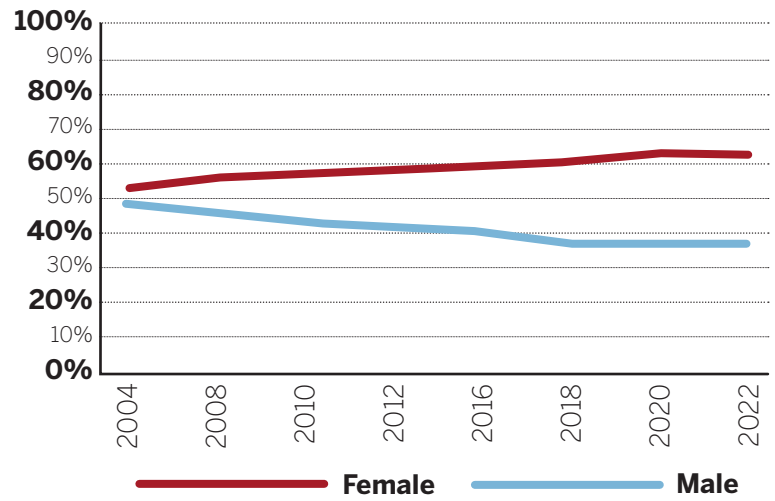
Trends in Racial Minority Groups



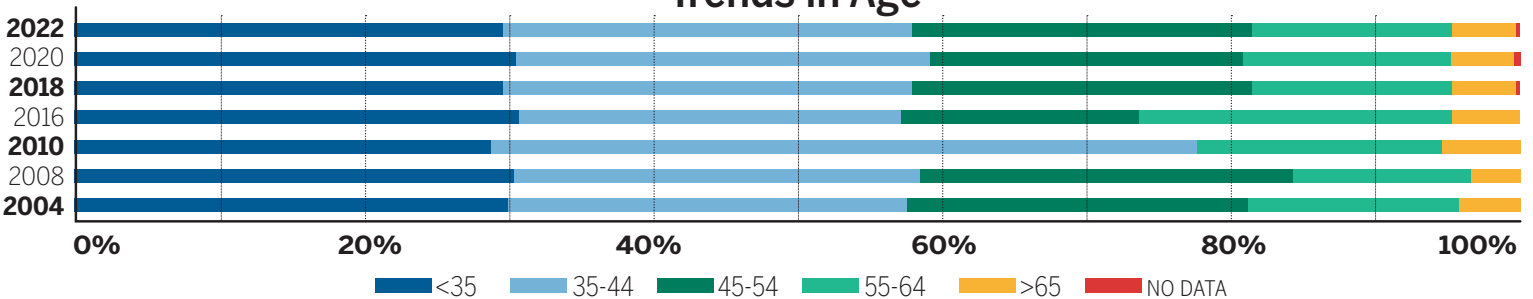
Trends in Ethnicity: % Hispanic



Trends in Gender



Trends in Age



APPENDIX

| Pharmacists | 2022 | | 2020 | | 2018 | | 2016 | | 2012 | | 2010 | | 2008 | | 2004 | |
|----------------------------------|-------|------|-------|------|-------|------|-------|------|-------|------|--------|-------|-------|------|-------|------|
| | N | % | N | % | N | % | N | % | N | % | N | % | N | % | N | % |
| Sex | | | | | | | | | | | | | | | | |
| Female | 3,767 | 62.5 | 3,983 | 62.4 | 3,229 | 60.7 | 2,929 | 59.5 | 2,777 | 58 | 3,068 | 56.5 | 2,728 | 55 | 2,290 | 52.4 |
| Male | 2,262 | 37.5 | 2,404 | 37.6 | 2,002 | 37.7 | 1,980 | 40.2 | 2,013 | 42 | 2,363 | 43.5 | 2,233 | 45 | 2,079 | 47.6 |
| Gender Not Available | - | - | - | - | 85 | 1.6 | 11 | 0.3 | - | - | 22 | - | 50 | - | - | - |
| Age | | | | | | | | | | | | | | | | |
| Under 35 | 1,796 | 29.8 | 1,939 | 30.4 | 1,590 | 29.9 | 1,516 | 30.8 | - | - | 1,566 | 29 | 1,337 | 30.7 | 1,497 | 30.3 |
| 35-44 | 1,713 | 28.3 | 1,825 | 28.6 | 1,499 | 28.2 | 1,295 | 26.3 | - | - | 2,629† | 48.6† | 1,219 | 28 | 1,368 | 27.6 |
| 45-54 | 1,398 | 23.3 | 1,401 | 21.9 | 1,152 | 21.7 | 818 | 16.6 | - | - | 2,629† | 48.6† | 1,113 | 25.5 | 1,180 | 23.8 |
| 55-64 | 845 | 14 | 913 | 14.3 | 820 | 15.4 | 1,063 | 21.6 | - | - | 908 | 16.8 | 534 | 12.2 | 698 | 14.1 |
| 65 and Older | 256 | 4.3 | 281 | 4.4 | 229 | 4.3 | 228 | 4.6 | - | - | 306 | 5.7 | 158 | 3.6 | 216 | 4.4 |
| Age Not Available | 21 | 0.4 | 29 | 0.4 | 26 | 0.5 | - | - | - | - | 44 | - | - | - | - | - |
| Ethnicity | | | | | | | | | | | | | | | | |
| Hispanic, Latino/a, Spanish | 110 | 1.8 | 114 | 1.8 | 100 | 1.9 | 73 | 1.5 | 79 | 1.6 | 68 | 1.4 | 72 | 1.5 | 47 | 1.1 |
| Not Hispanic, Latino/a, Spanish | 5,919 | 98.2 | 6,273 | 98.2 | 4,258 | 80.1 | 4,558 | 92.6 | 4,711 | 98.4 | 5,350 | 98.7 | 4,883 | 98.5 | 4,320 | 98.9 |
| Non-Respondents | - | - | - | - | 958 | 18 | 289 | 5.9 | - | - | - | - | - | - | - | - |
| Race | | | | | | | | | | | | | | | | |
| White | 5,253 | 87.1 | 5,604 | 87.7 | 4,744 | 89.2 | 4,406 | 89.6 | 4,307 | 89.9 | 4,922 | 90.8 | 4,564 | 91.9 | 4,034 | 92.4 |
| Asian | 372 | 6.2 | 371 | 5.8 | 264 | 5 | 254 | 5.2 | 219* | 4.6* | 227* | 4.2* | 169* | 3.4* | 137* | 3.1* |
| Black or African American | 238 | 3.9 | 249 | 3.9 | 186 | 3.5 | 180 | 3.7 | 171 | 3.6 | 172 | 3.2 | 134 | 2.7 | 116 | 2.7 |
| Native Hawaiian/Pacific Islander | 5 | 0.1 | 5 | 0.1 | 7 | 0.1 | - | - | - | - | - | - | - | - | - | - |
| American Indian or Alaska Native | 2 | 0.0 | 4 | 0.1 | 4 | 0.1 | 6 | 0.1 | 1 | 0.02 | 1 | 0.02 | 2 | 0.04 | 2 | 0.05 |
| Other | 74 | 1.2 | 80 | 1.3 | - | - | - | - | 61 | 1.3 | 70 | 1.3 | 72 | 1.4 | 58 | 1.3 |
| Multiracial | 85 | 1.4 | 74 | 1.2 | 47 | 0.9 | 31 | 0.6 | 31 | 0.6 | 26 | 0.5 | 26 | 0.5 | 20 | 0.5 |
| Non-Respondents | - | - | - | - | 64 | 1.2 | 43 | 0.9 | 0 | 0 | 35 | - | 44 | - | 36 | - |

Source: Indiana Pharmacist License and Supplemental Data Survey, 2004-2022 * Asian and Native Hawaiian/Pacific Islander demographics were combined between 2004 and 2012. † 35-54 and 45-54 age groups were combined in 2010 **Notes:** pharmacist license and supplemental data were not available for 2006 and 2014

ENDNOTES

- ⁱ A Longitudinal Assessment of Diversity in Indiana’s Health Workforce: Introduction and Methodology. (2022). Bowen Center for Health Workforce Research and Policy. Indiana University School of Medicine.
- ⁱⁱ APhA Who We Are (2024) <https://www.pharmacist.com/who-we-are>
- ⁱⁱⁱ The APhA Diversity, Equity, Inclusion, and Belonging Committee. <https://www.pharmacist.com/Advocacy/APhA-DEIB-Committee>
- ^{iv} APhA Task Force on Addressing Structural Racism. 2020-2023 Report. https://s3.amazonaws.com/cdn.pharmacist.com/CDN/21087%20-%20DEI%20Addressing%20Structural%20Racism%20Report%20PDF_FIN.pdf?AWSAccessKeyId=AKIAQNYDT252YKJO7IYX&Expires=1717097602&Signature=cPPXM%2FHcQ0cmf824C%2FfYjiJrWSA%3D
- ^v AACP Diversity, Equity, Inclusion and Anti-racism Committee Charter. American Association of Colleges of Pharmacy (2024). <https://www.aacp.org/article/aacp-diversity-equity-inclusion-and-anti-racism-committee-charter>
- ^{vi} AACP Diversity, Equity, Inclusion and Anti-racism Committee Charter. American Association of Colleges of Pharmacy (2024). <https://www.aacp.org/article/aacp-diversity-equity-inclusion-and-anti-racism-committee-charter>
- ^{vii} About NPha <https://nationalpharmaceuticalassociation.org/About-NPhA>
- ^{viii} HRSA NHSC Substance Use Disorder Workforce Loan Repayment Program <https://nhsc.hrsa.gov/loan-repayment/nhsc-sud-workforce-loan-repayment-program>
- ^{ix} <https://indianapharmacy.org/content.asp?contentid=149>

ACKNOWLEDGMENTS

The Bowen Center for Health Workforce Research and Policy would like to recognize the many individuals and organizations that contributed to making this report possible. Indiana University School of Medicine provides collaborative and technical support for data management. The Indiana Professional Licensing Agency has provided ongoing support in providing license and supplemental data on Indiana's licensed health professionals.

COPYRIGHT

© 2022 Bowen Center for Health Workforce Research and Policy
Department of Family Medicine
Indiana University School of Medicine
980 Indiana Avenue
Indianapolis, IN 46202

RECOMMENDED CITATION

A Longitudinal Assessment of Diversity in Indiana's Health Workforce: Pharmacists. (2024).
Bowen Center for Health Workforce Research and Policy. Indiana University School of Medicine.

CORRESPONDENCE

Please address any correspondence regarding this document to the Bowen Center for Health Workforce Research and Policy via email at bowencrt@iu.edu or by phone at 317.278.0316.

AUTHORED BY:

- **Yan Ge**, Research Coordinator
- **Madison Bott**, Policy Analyst
- **Courtney Medlock**, Assistant Director
- **Sierra Vaughn**, Assistant Director
- **Hannah Maxey**, Director