



INDIANA'S PHARMACIST WORKFORCE

BRIEF

BOWEN CENTER FOR HEALTH WORKFORCE RESEARCH AND POLICY // AUGUST 2019



SCHOOL OF MEDICINE

BOWEN CENTER FOR HEALTH
WORKFORCE RESEARCH & POLICY

INDIANA'S PHARMACIST WORKFORCE

Fact Sheet



this report is based on the

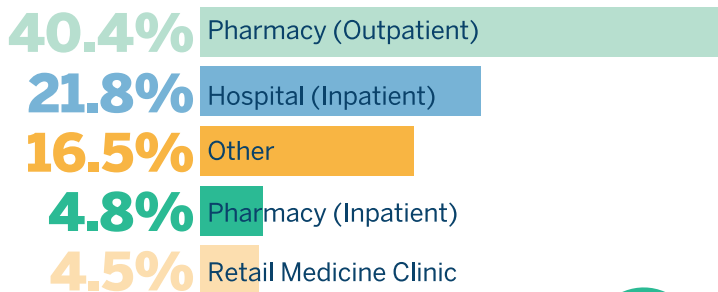
5,316
Pharmacists

who hold an active license address in Indiana and responded to survey in 2018

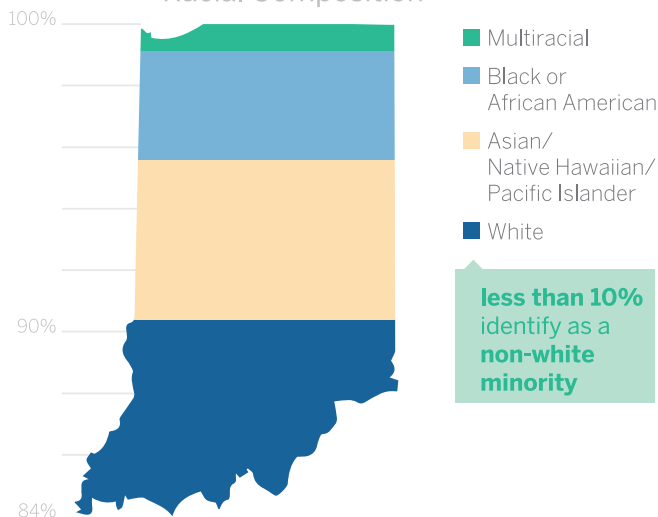
Percent of Male and Female Pharmacists



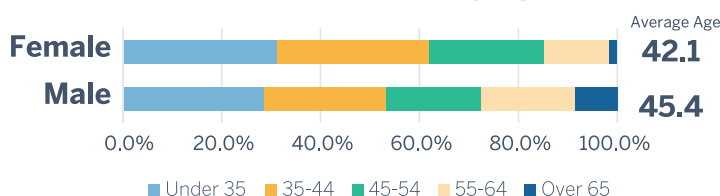
What are Their Top 5 Practice Specialties?



Racial Composition



Indiana Pharmacist Workforce by Age and Gender



11.1%
of pharmacists
completed
residency



66.2%

Of pharmacists reported their primary field as medication dispensing



Where Did Indiana Pharmacists Complete Their Education?



77.8%
Indiana



10.3%
Indiana's
Contiguous States



9.8%
Other States



2.1%
Another Country



INDIANA'S PHARMACIST WORKFORCE

Policy Report

SENATE ENROLLED ACT 223 (2018)

DATA SOURCES

1. **License:** collected at time of initial license application and updated at renewal

Data points include:

License status, license address, demographic characteristics (selected, varies by profession), initial license data, license expiration date

2. **Survey:** collected during online license renewal

Data points include:

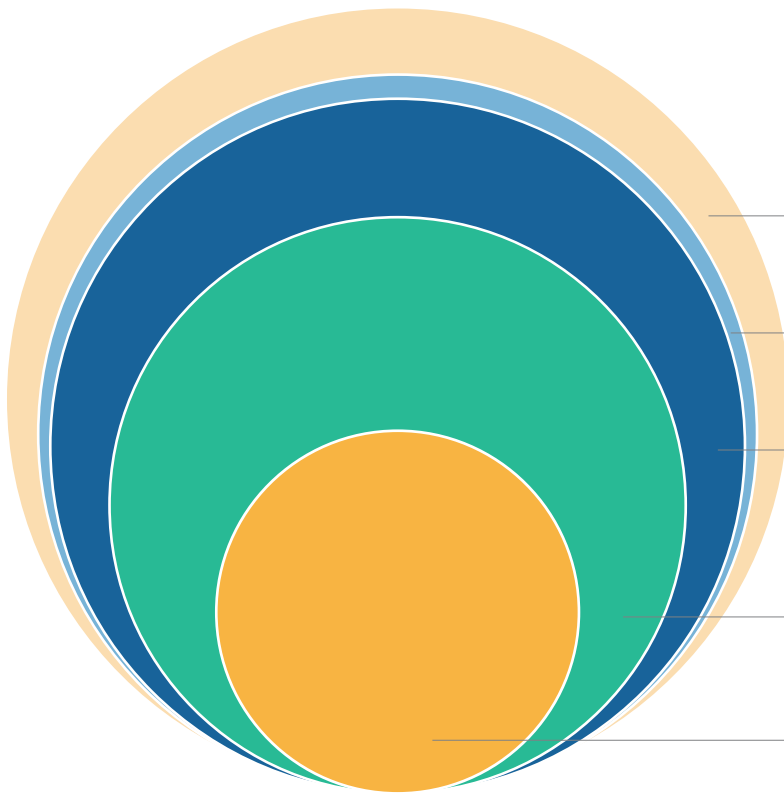
Demographic characteristics, educational characteristics, practice characteristics

KEY INFORMATION

Until 2019, license renewal surveys were voluntary (meaning key information has not been/is not available for non-respondents).³

Beginning in 2019, Senate Enrolled Act 223 (2018) will be implemented in Indiana and licensees will be required to provide certain information on the online renewal survey (meaning Indiana will have more comprehensive, high-quality data on the licensed health workforce than was previously available).⁴

EXCLUSION/INCLUSION CRITERIA



11,354 licensed pharmacists in Indiana¹

10,980 hold an active license

10,075 hold an active license and responded to survey

Information is unavailable for the 905 pharmacists who did not respond to any question on the survey

8,337 reported actively working in pharmacy

5,316 had a valid Indiana license address

3,021 pharmacists did not have an Indiana license address



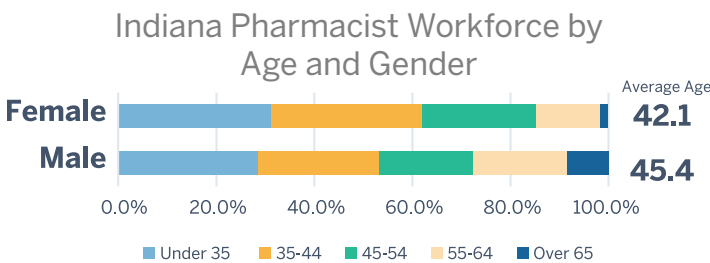
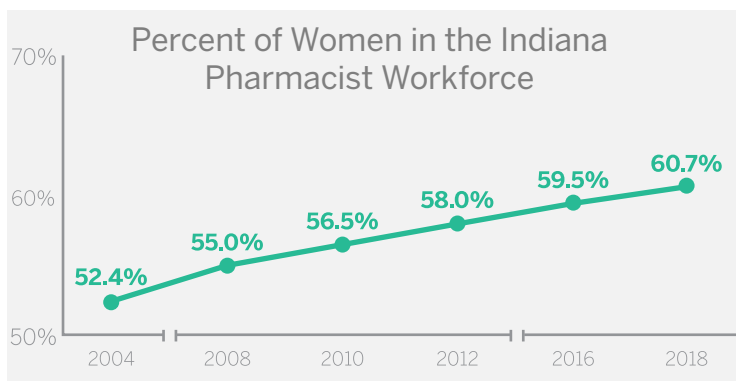
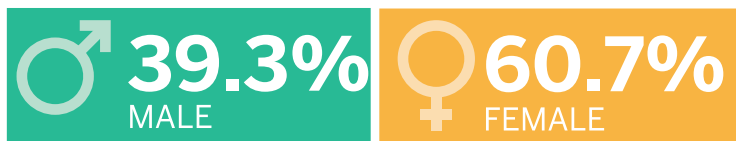
UPDATE ON INCLUSION CRITERIA FOR PHARMACISTS WORKFORCE REPORTS

In an effort to maximize the number of respondents included in reported, the 2018 sample includes pharmacists with a verified **license address** in Indiana, as opposed to the 2016 sample that included pharmacists with a verified **practice address** in Indiana.

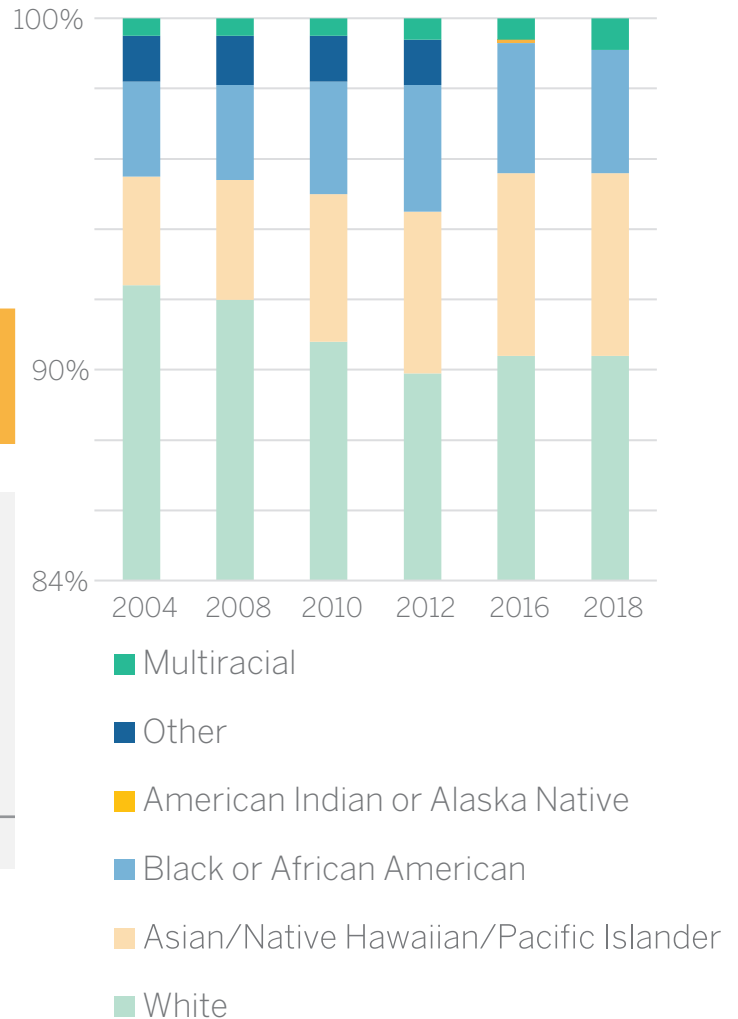
PHARMACIST DEMOGRAPHIC AND EMPLOYMENT CHARACTERISTICS

DEMOGRAPHIC CHARACTERISTICS

There has been little change in racial/ethnic diversity in the pharmacist workforce in the state of Indiana over the last decade. Data demonstrates that less than 10% of the Indiana pharmacist workforce identifies as a non-white minority. In terms of gender, female pharmacists now account for more than half (60.7%) of the workforce and their average age is slightly lower than males.



Trends in Race



< 10% identify as a non-white minority

EMPLOYMENT CHARACTERISTICS

5.5%
Of pharmacists plan to **increase** their hours in patient care

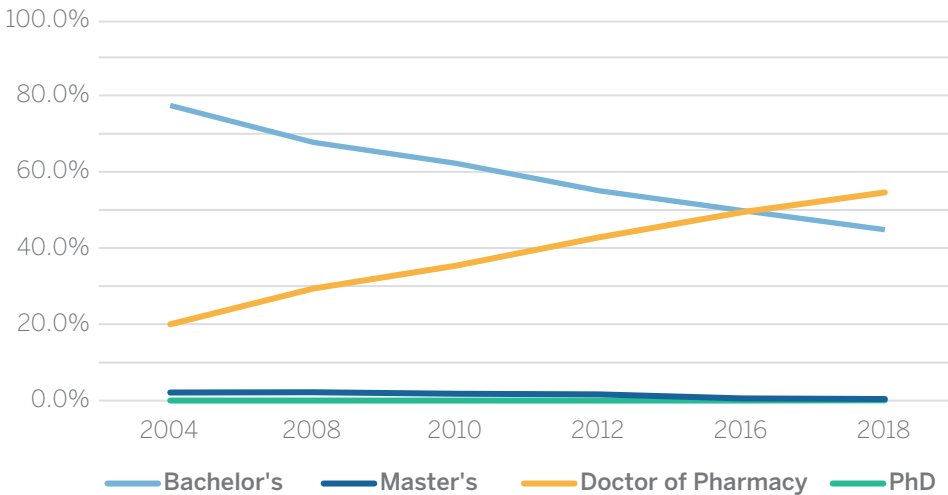


86.5%
of pharmacists reported they have **no plans** to change their employment status for the next 12 months



PHARMACIST EDUCATIONAL CHARACTERISTICS

Pharmacists' Education 2004-2018



TRENDS IN PHARMACY EDUCATION

The entry-level educational requirement for individuals seeking licensure as a pharmacist changed in 2000 from a bachelor's degree to a doctoral degree.⁶ Since that time, Indiana has seen a gradual increase in the proportion of doctorally-trained pharmacists. 2018 is the first year that the majority of Indiana's pharmacists have a doctoral degree.

Note: Variations in reporting may exist. (In data reports from 2004-2012, PhD was included as a response option, Certificate was not included. In data reports from 2016-to-present, PhD was not included as response option and Certificate was included. Full details can be found in all historical data reports.⁵) From 2004-2012, data reported is the "highest level of education". Information presented from 2016-2018 represent pharmacists "qualifying education."

11.1% of pharmacists completed residency



Where did Indiana Pharmacists Complete Their Qualifying Education?



76.5%
Indiana



10.1%
Indiana's
Contiguous States



9.6%
Other States



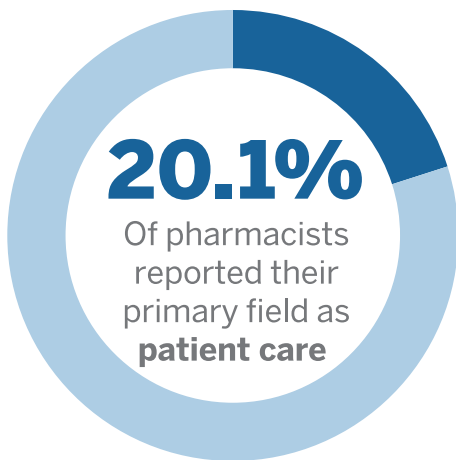
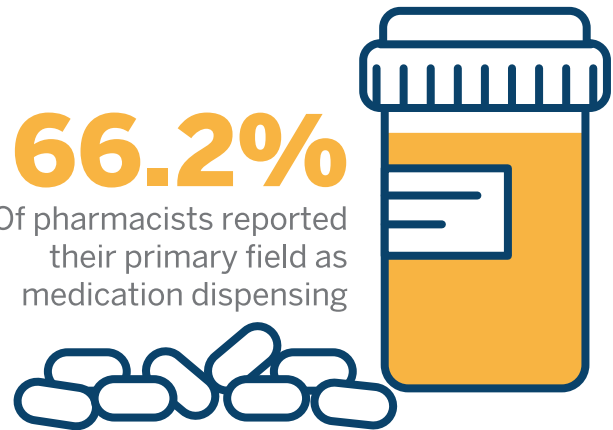
2.1%
Another Country

PHARMACIST PRACTICE AND PROFESSIONAL CHARACTERISTICS

PRACTICE SETTING AND PRIMARY FIELD

Indiana pharmacists work in a variety of settings. The greatest proportion of pharmacists reported working in a setting classified as an outpatient pharmacy (40.4%), followed by 21.8% of pharmacists that reported working in a hospital inpatient setting.

The role of the pharmacist has expanded in recent years to include patient services such as medication management.⁷ Among Indiana's pharmacists, the majority still report their primary field as medication dispensing (66.2%), with 20.1% of pharmacists reporting their primary field as patient care services.

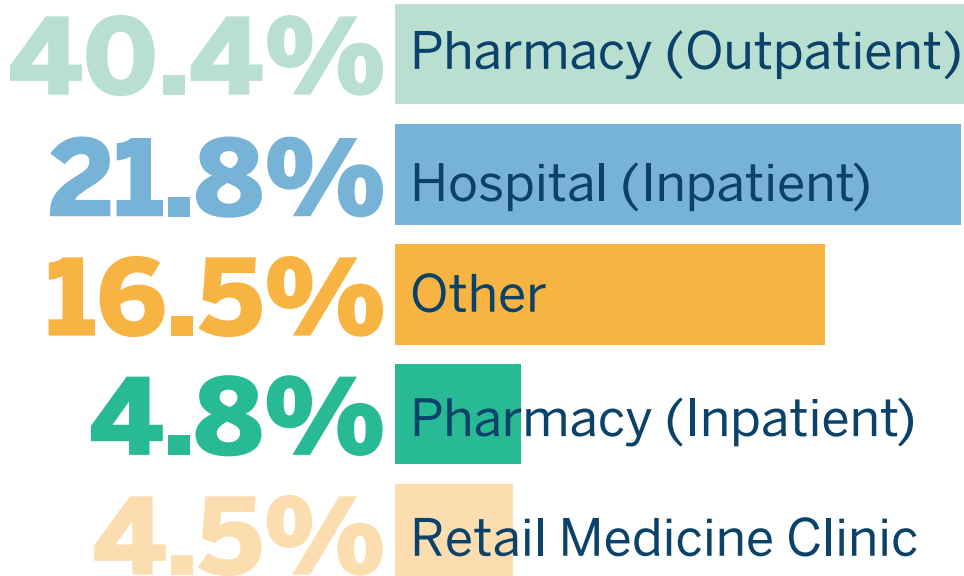


IMMUNIZATION ADMINISTRATION

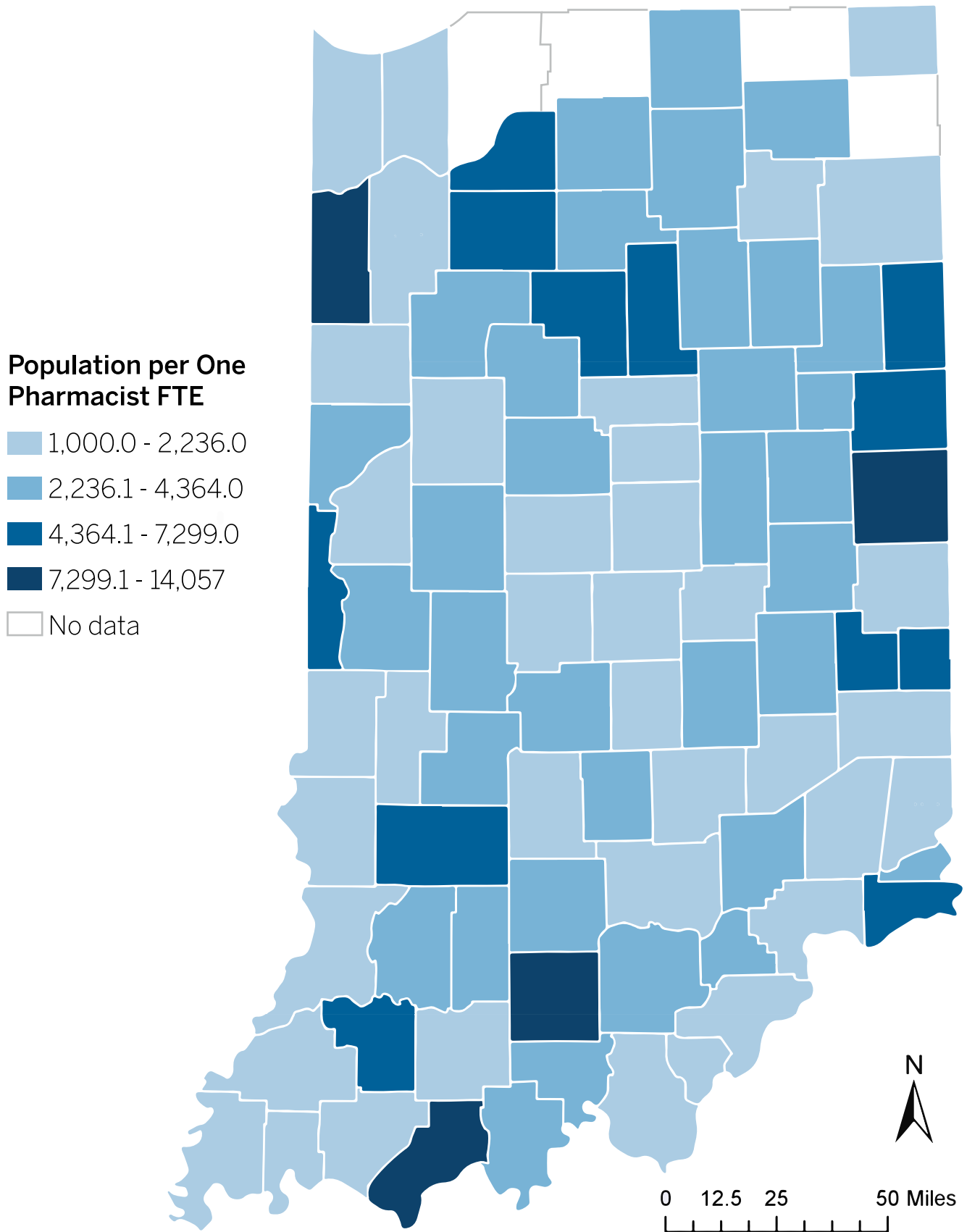
Under Indiana Code, pharmacists may administer specified vaccines under an order, prescription or protocol approved by a physician for individuals who are at least 11 years of age (per IC 25-26-13-31.2).⁸ Authorized immunizations include:

- Influenza
- Shingles (herpes zoster)
- Pneumonia (for individuals at least 50 years of age)
- Tetanus, diphtheria, and acellular pertussis (whooping cough)
- Human papillomavirus (HPV) infection
- Meningitis
- Measles, mumps, and rubella
- Varicella
- Hepatitis A
- Hepatitis B
- Haemophilus influenzae type b (Hib)

Top Five Pharmacist Practice Settings



PHARMACIST WORKFORCE CAPACITY



Source: Indiana Pharmacist Re-Licensure Survey, 2018; American Community Survey, 2015 5-year Estimate.

HOT TOPICS IN PHARMACY POLICY

HEA
1382

(2018)

STUDY OF PHARMACY DESERTS

AUTHOR: REP. C BROWN

Summary: Defines “pharmacy desert” as an underserved geographic area where access to pharmacy is limited. Urges the legislative council to assign a study of pharmacy deserts, including: identifying deserts, examining programs that address the problem, and identifying effective solutions.

Implications for pharmacists: Pharmacist distribution may be an important component to the study of pharmacy deserts

SB
108

(2019)

PHARMACIST CARE STUDY

AUTHOR: SEN. GROOMS & SEN. GARTEN

Summary: Urges the legislative council to assign study topics, including: creation of an “advanced practice pharmacist,” qualifications & functions of an “advanced practice pharmacist”, inclusion of pharmacists & advanced practice pharmacists as providers in networks of insurers.

Implications for pharmacists: The outcomes of a study committee may include sunrising a new profession: advanced practice pharmacists.

HB
1180

(2019)

PHARMACY BENEFITS

AUTHOR: REP. CARBAUGH

Summary: Calls for a study of regulation of pharmacy benefit managers.

Implications for pharmacists: The outcomes of a study committee may include recommendations for state licensure of pharmacy benefit managers.

HEA
1246

(2019)

HEALTH MATTERS

AUTHOR: REP. DAVISSON

Summary: Impacts prescription transfers, dispensing of injectable epinephrine and glucagon, and automated dispensing systems. Allows the board of pharmacy to establish continuing education requirements for pharmacy technicians.

Implications for pharmacists: Provides provisions for qualifying pharmacist delegation at a remote dispensing facility.

HEA
1248

(2019)

PHARMACISTS; PHYSICIAN ASSISTANT

AUTHOR: REP. DAVISSON

Summary: Changes the limit for a pharmacist-initiated refill to be the lesser of a) the quantity on the most recent fill, or b) a 30-day supply (does not apply to controlled substances). Allows pharmacists to change a prescription's quantity, dosage, or update missing information if acting in good faith.

Implications for pharmacists: Changes practice of pharmacist medication management.

REFERENCES

- ¹See Data Report: 2018 Pharmacists Re-Licensure Survey for full inclusion/exclusion criteria and survey methodology. <https://scholarworks.iupui.edu/bitstream/handle/1805/16644/2018%20Pharmacist%20Survey%20Instrument.pdf?sequence=1&isAllowed=y>
- ²See Data Report: 2018 Pharmacists Re-Licensure Survey Instrument for full inclusion/exclusion criteria and survey methodology. <https://scholarworks.iupui.edu/bitstream/handle/1805/18812/2018%20Pharmacist%20Data%20Report%20Final.pdf?sequence=4&isAllowed=y>
- ³What does this mean for this report? The information contained in this fact sheet is representative of the sample of pharmacists that renewed their Indiana pharmacist license in 2018 and responded to the voluntary survey that they were actively working in pharmacy. Future reports will contain a more complete picture of the pharmacist workforce.
- ⁴Senate Enrolled Act 223 (2018) <http://iga.in.gov/static-documents/b/0/6/0/b0603ddf/SB0223.06.ENRH.pdf>
- ⁵Data reports available at: 2012: <https://scholarworks.iupui.edu/bitstream/handle/1805/6479/2012%20Indiana%20Pharmacist%20Workforce.pdf?sequence=1&isAllowed=y> 2016: https://scholarworks.iupui.edu/bitstream/handle/1805/11836/2016%20Pharmacist%20Data%20Report%20Final_Authored%20Version.2.28.19.pdf?sequence=9&isAllowed=y
- ⁶Kreling DH, Doucette WR, Chang EH, Gaither CA, Mott DA, Schommer JC. Practice characteristics of bachelor of science and doctor of pharmacy degreed pharmacists based on the 2009 National Workforce Survey. *Am J Pharm Educ.* 2010;74(9):159.
- ⁷Ramalho de Oliveira, D., et al. (2010). "Medication therapy management: 10 years of experience in a large integrated health care system." *Journal of Managed Care Pharmacy* 16(3):185-195.
- ⁸Indiana Code 25-26-13-31.2 (2018) Additional information available at: <http://iga.in.gov/legislative/laws/2018/ic/titles/025#25-26-13-31.2>

QUESTIONS?

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