



VCU  
School of Pharmacy

## Comparison of NAPLEX First-Time Pass Rates Before and After the COVID-19 Pandemic

Laura M. Frankart, PharmD, MEd, Virginia Commonwealth University School of Pharmacy  
Kamila Dell, PharmD, University of South Florida Taneja College of Pharmacy



USF Health  
Taneja College of Pharmacy

### Highlights

- First-time NAPLEX pass rates declined significantly over the COVID-19 pandemic
- More than one-third of schools had a decline of 10% or more
- Contributing factors likely extend beyond the COVID-19 pandemic environment
- Schools need student-level data from NABP to determine causes of declining pass rates

### Objectives

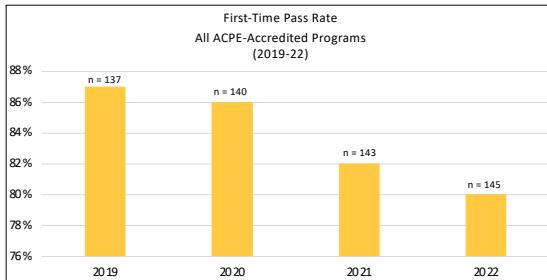
To describe the change in first-time pass rates of ACPE-accredited schools of pharmacy before and after the COVID-19 pandemic.

### Methods

A retrospective, observational cohort study using publicly published data of passing rates for the North American Pharmacist Licensure Examination (NAPLEX). Programs with first-time pass rates from 2019 to 2022 graduates were included in the analysis.

### Results

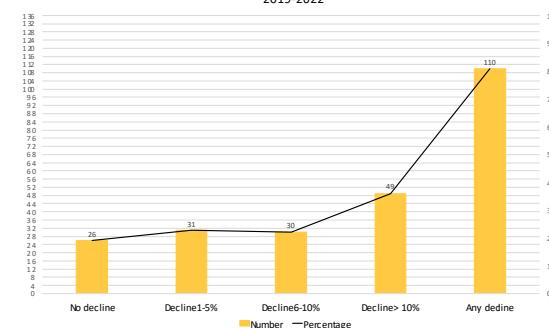
- Average decline in first-time pass rate was 7% across all programs
- 136 programs included in analysis
- Compared 2019 pass rates to 2020, 2021, and 2022



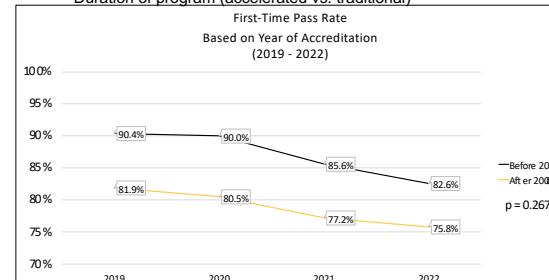
### Results

- No significant difference in first-time pass rates when 2019 graduates were compared to 2020 graduates ( $p=0.966$ ).
- Significant decrease in first-time pass rates when comparing 2019 graduates to 2021 graduates ( $p<0.001$ ) and 2022 graduates ( $p<0.001$ )

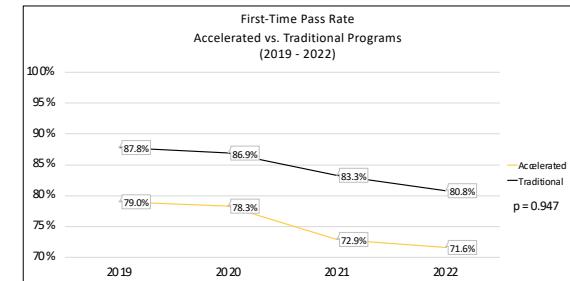
First-Time Pass Rate Decline  
Number & Percentage of ACPE Accredited Schools  
2019-2022



- Decreases were consistent across all programs regardless of:
  - When program accredited (before 2000 vs. after 2000)
  - Duration of program (accelerated vs. traditional)



### Results



### Discussion

There are a multitude of factors that could explain the decline in first-time pass rates including stresses of learning during a global pandemic, virtual learning being less effective than in-person learning, remote exam administration which increase opportunities for academic integrity violations, an update to the NAPLEX blueprint in 2021, and declining applicant pools which may increase the proportion of students who struggle in the PharmD curriculum. The lack of access to student-level data limits the ability to assess the sources of the decline in first-time pass rates.

### Conclusion

Addressing the concerning decline in first-time pass rates will take a well-informed and coordinated approach. We encourage NABP to provide individual-level data to help schools assess admissions, curriculum, and assessment practices.

### References

- North American Pharmacist Licensure Examination Passing Rates for 2019-2021 Graduates. National Association of Boards of Pharmacy. Published April 29, 2022.
- North American Pharmacist Licensure Examination Passing Rates for 2020-2022 Graduates. National Association of Boards of Pharmacy. <https://nabp.pharmacy/wp-content/uploads/2021/03/NAPLEX-Pass-Rates-2022.pdf> Published January 31, 2023. Accessed May 26, 2023.

Correspondence:  
Laura M. Frankart, PharmD, MEd  
Email: [Lamorgan@vcu.edu](mailto:Lamorgan@vcu.edu)  
AACP Annual Meeting  
July 22 – 25, 2023