Pharmacy COVID-19 Vaccination Led to an Uptick in Routine Immunizations

Adam Howsare, MPH

Department of Public Health
CITY OF PHILADELPHIA

Topics Discussed

- History of pharmacy vaccination
- Onboarding during COVID-19 pandemic
- Literature review – advantages and drawbacks
- Pharmacy vaccination in Philadelphia
  - COVID-19 vaccination
  - Routine vaccination before and after pandemic
- Lessons learned

Legal History

- 1961 – First Law
- 2015 – Expansion
- Goal – increase flu vaccinations

2019 Hepatitis A Outbreak

- Pharmacy partners during outbreak
- Legal, logistical issues
- Data quality issues

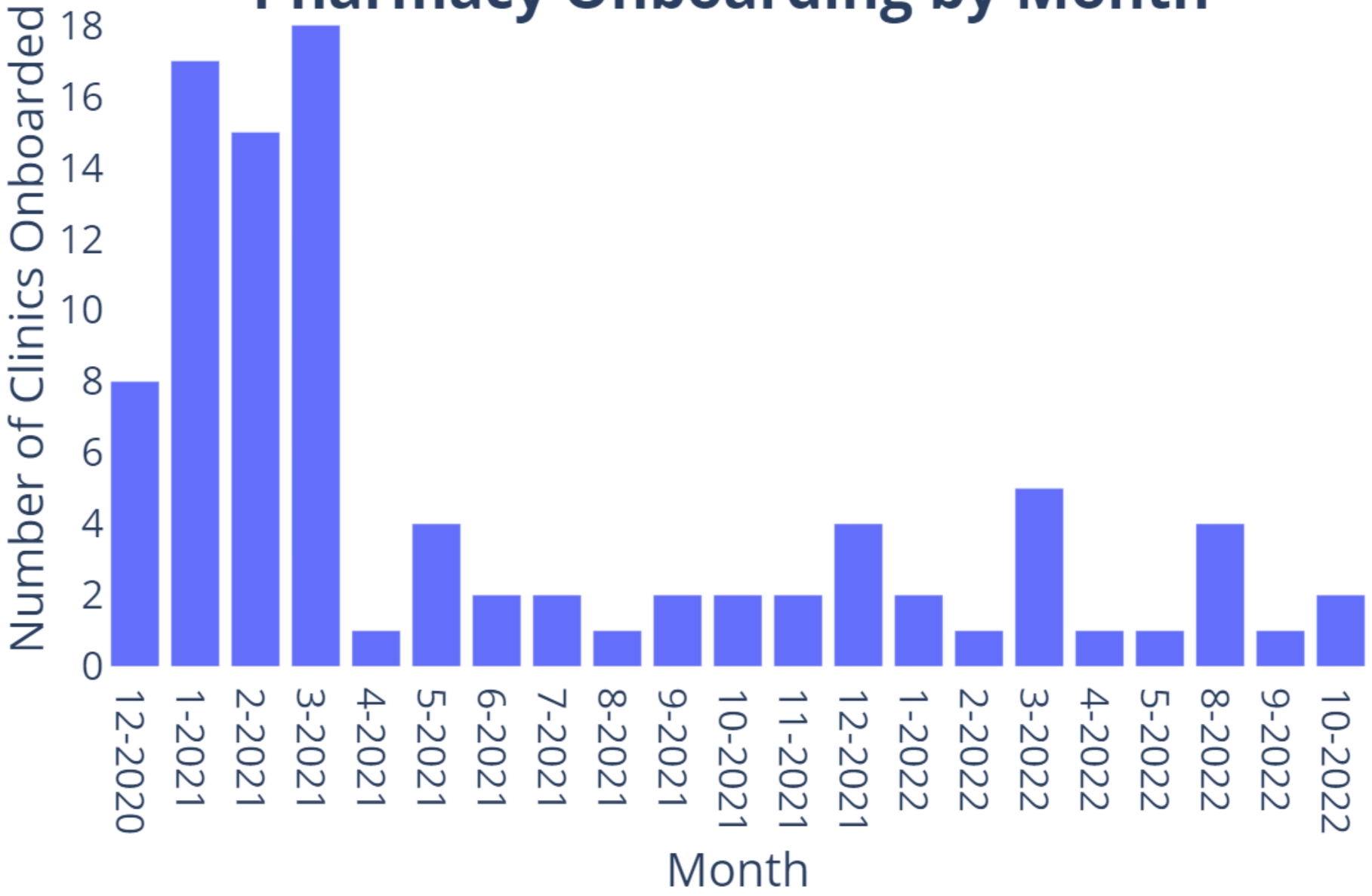
COVID

- Emergency declaration
- End of emergency
- Current efforts

Onboarding

Department of
Public Health
CITY OF PHILADELPHIA

Pharmacy Onboarding by Month



Pharmacy Onboarding
Issues Identified

- New to process
- Technical abilities
- Data standards

Pharmacy onboarding

How we make this process simple and standardized?

- Clear standard system
- Resources for FAQ's

Pharmacy Vaccination - Literature Review

Department of Public Health
CITY OF PHILADELPHIA

Pharmacy Vaccination - Advantages

- Increased vaccination acceptance
  - 27% increase
  - 117% if no flu vaccine in previous year
- Pharmacist-led intervention effective, highly trusted
- Convenience
  - 1/3 would not have gotten vaccine

Pharmacy Vaccination - Advantages

- Target younger populations
- Cost-effective
  - 12 minutes, $11.57 at pharmacy
  - 1 hour, $28.67 at primary care
- Faster

Pharmacy Vaccination - Drawbacks

- Importance of well visits to doctor, especially for children
- Routine vaccination at pharmacies during pandemic did not happen

Pharmacy Vaccination - Drawbacks

- Not very popular among elderly
- Less popular among minority populations/those with barriers to care
  - No correlation with socioeconomic status
  - Foreign born residents more likely to support

Pharmacy Vaccination - Drawbacks

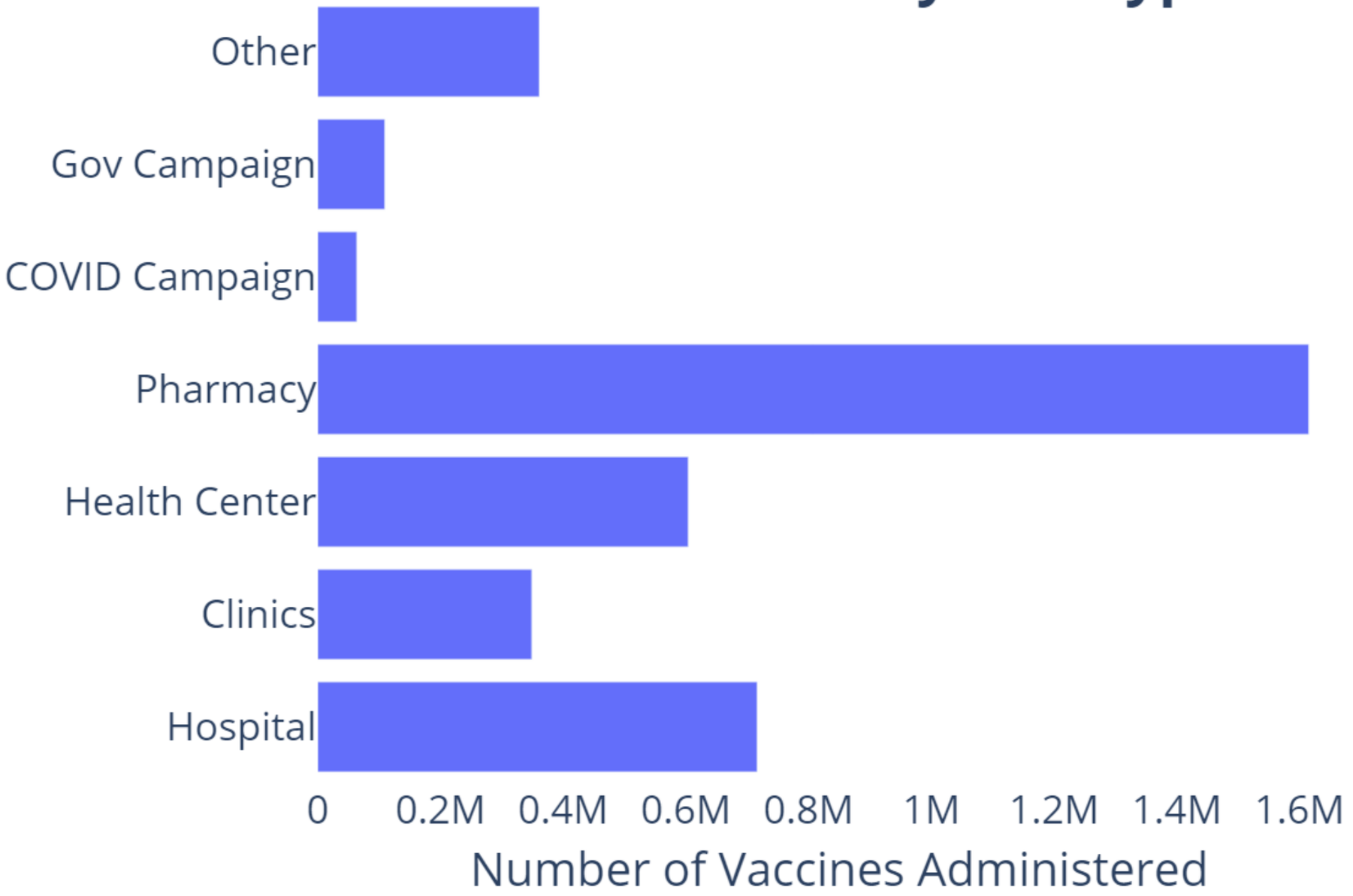
- Reimbursement issues
  - Medicare issues
  - No Medicaid support
  - Medical vs. pharmacy benefits

Pharmacy Vaccination - Data

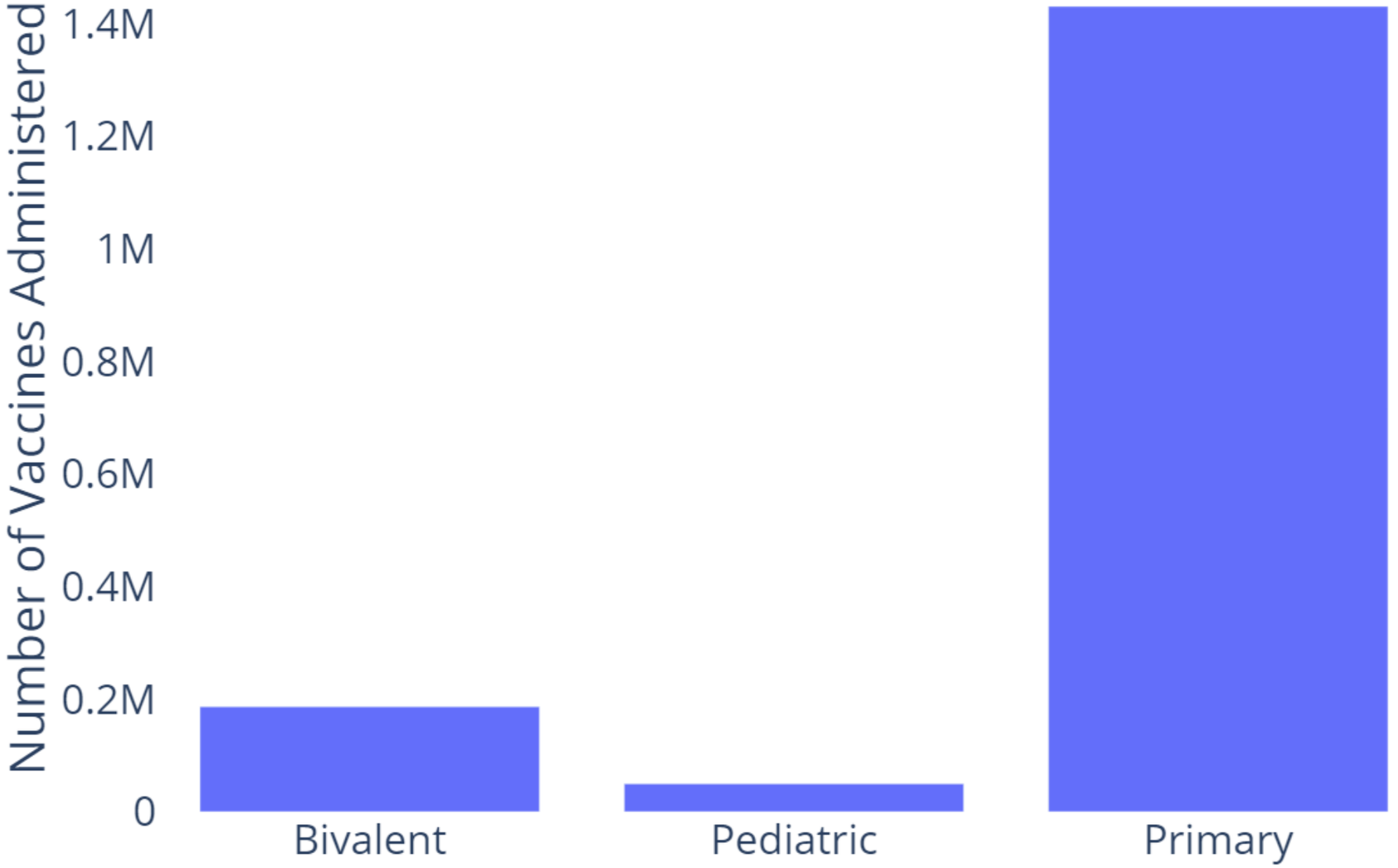
Pulling the Data

- Pre-pandemic vs pandemic years
  - Pre-pandemic: 12/15/2018-12/15-2020
  - Pandemic years: 12/16/2020-12/16/2022
- Classified vaccine types by antigen
- Identifying pharmacies

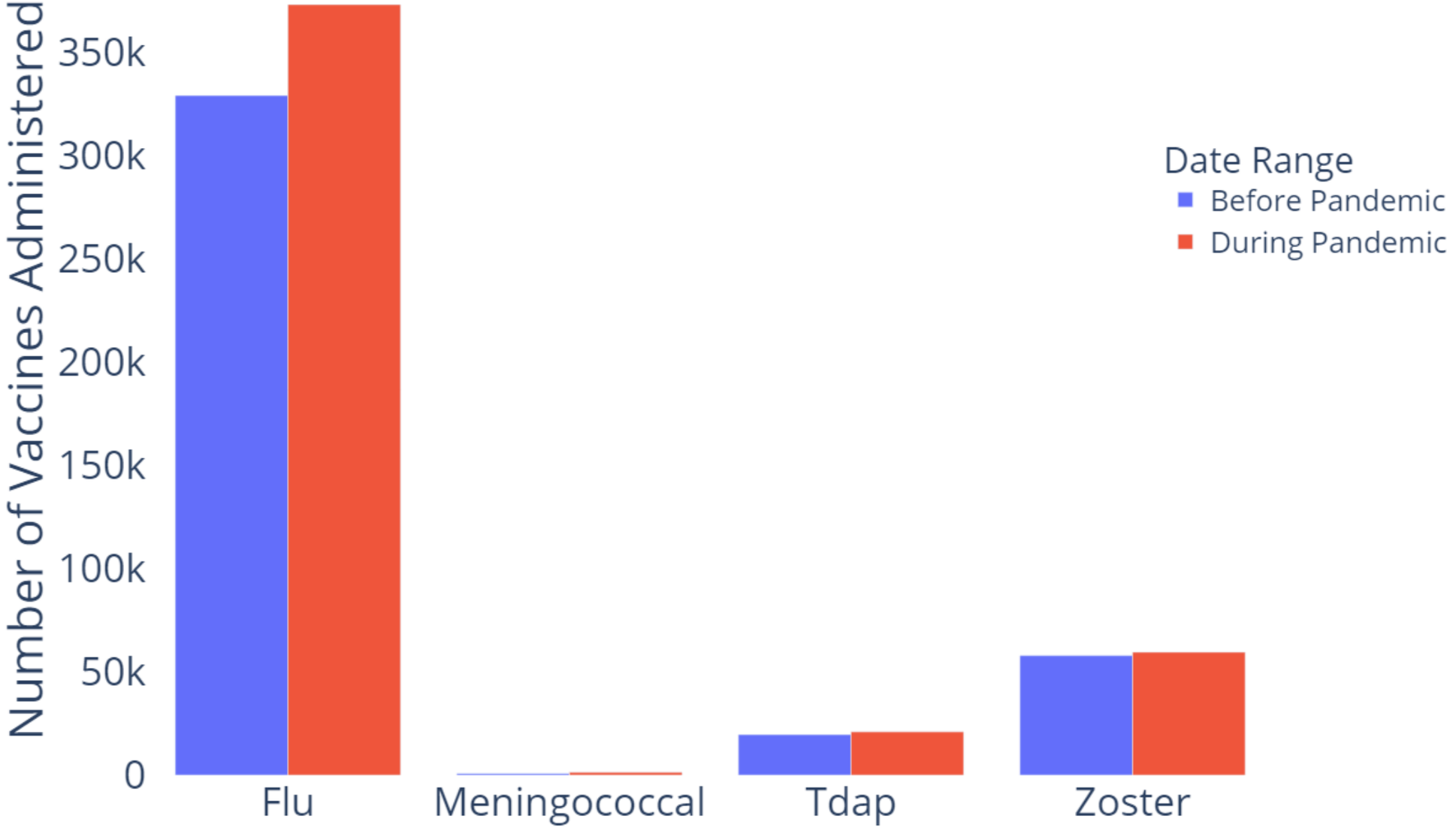
COVID Administration by Site Type



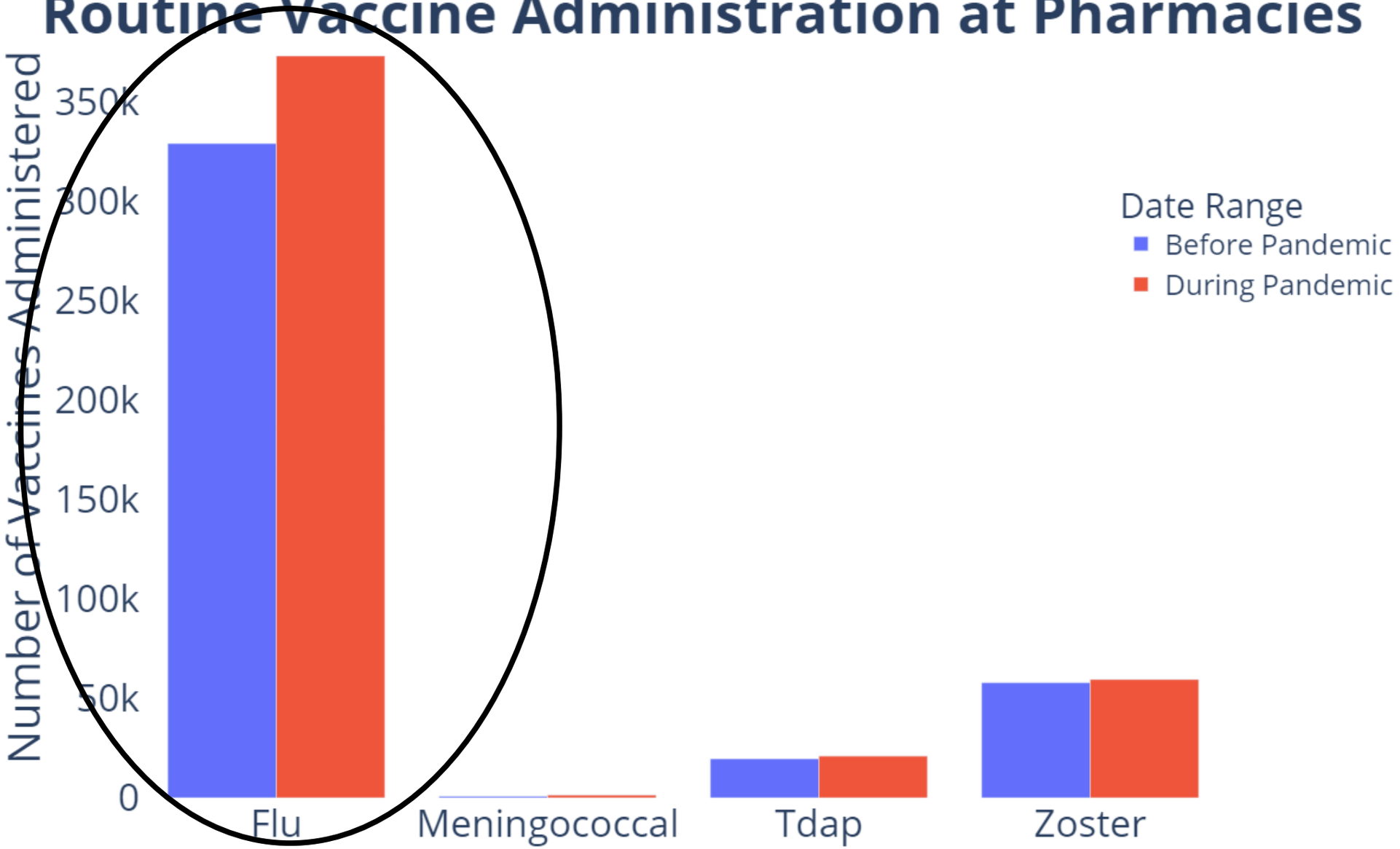
COVID Vaccine Types at Pharmacies



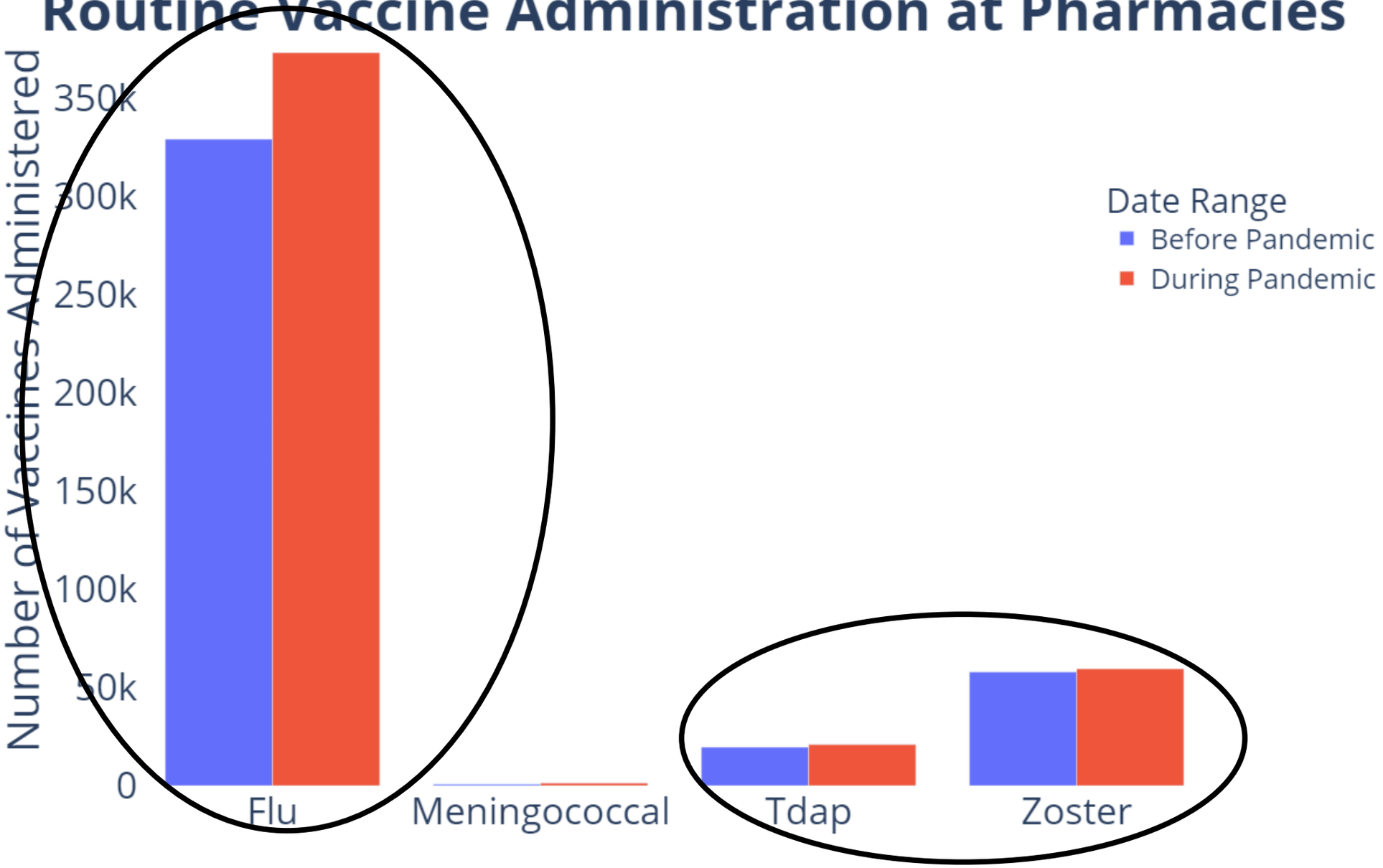
Routine Vaccine Administration at Pharmacies



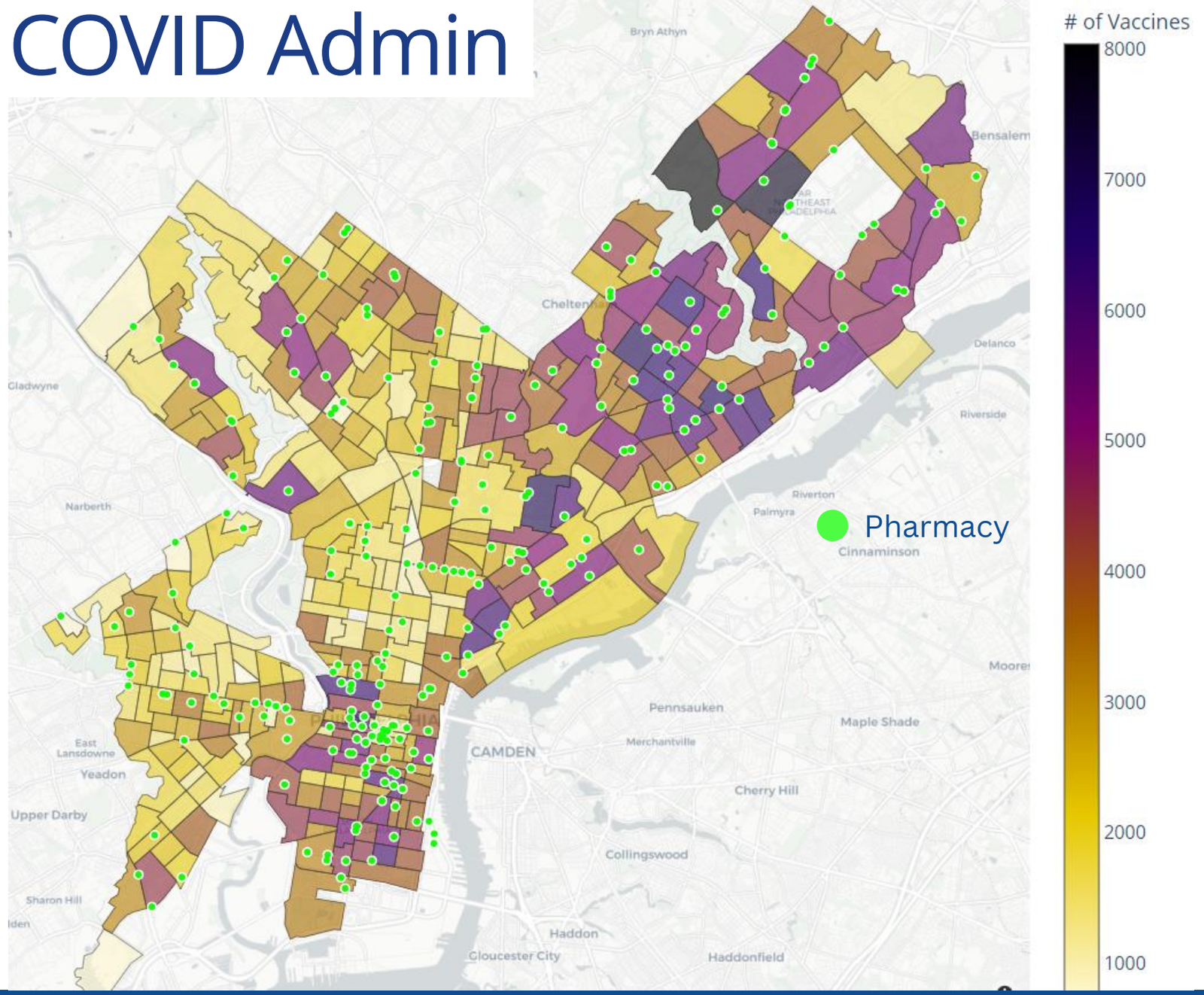
Routine Vaccine Administration at Pharmacies



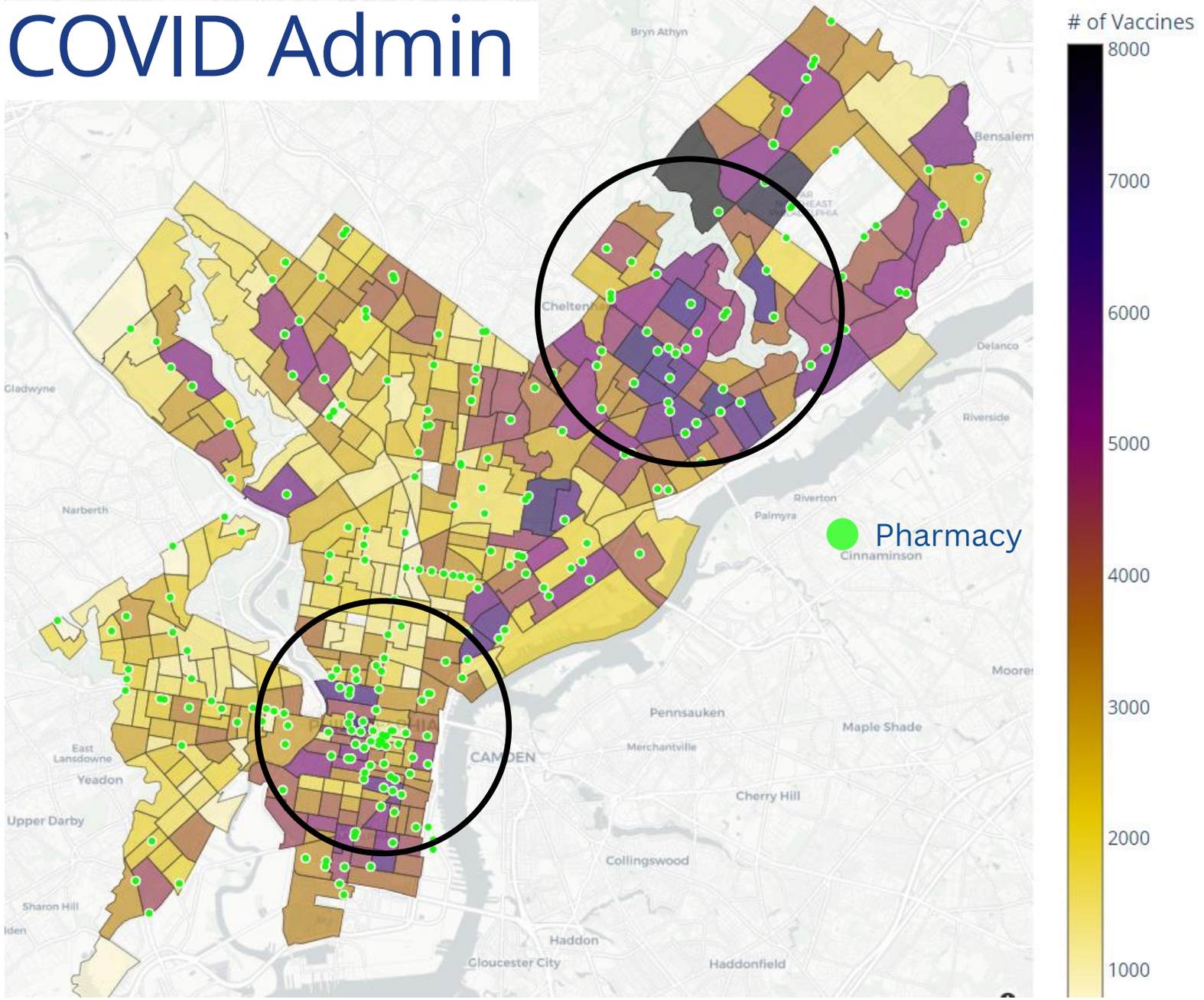
Routine Vaccine Administration at Pharmacies



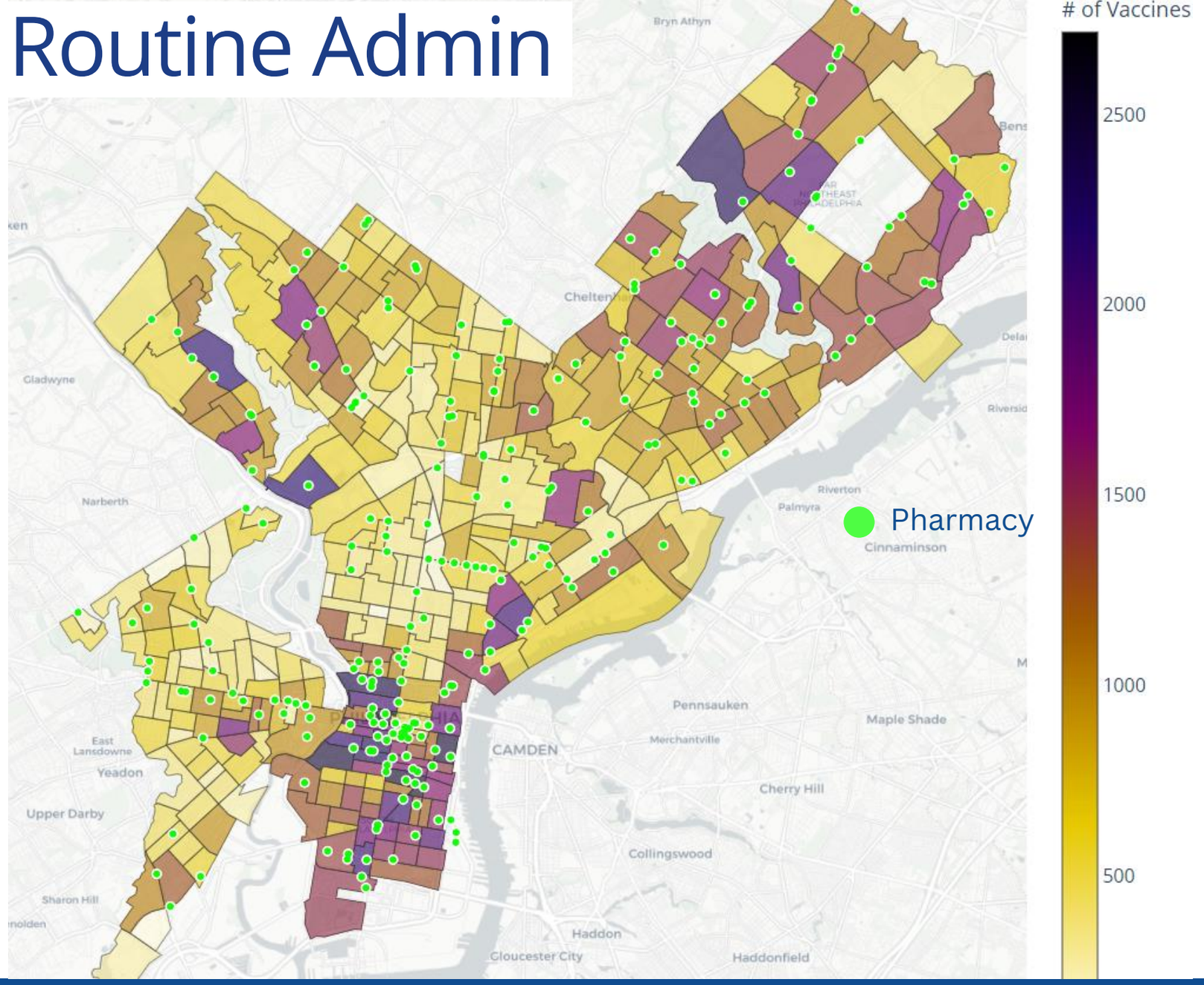
COVID Admin


Bryn Athyn
Bensalem
Cheltenham
Delanco
Gladwyne
Riverside
Narberth
Riverton
Palmyra
Cinnaminson
Pharmacy
Moorestown
Pennsauken
Maple Shade
East Lansdowne
Yeadon
CAMDEN
Merchantville
Cherry Hill
Upper Darby
Collingswood
Sharon Hill
Haddon
Gloucester City
Haddonfield
# of Vaccines
8000
7000
6000
5000
4000
3000
2000
1000

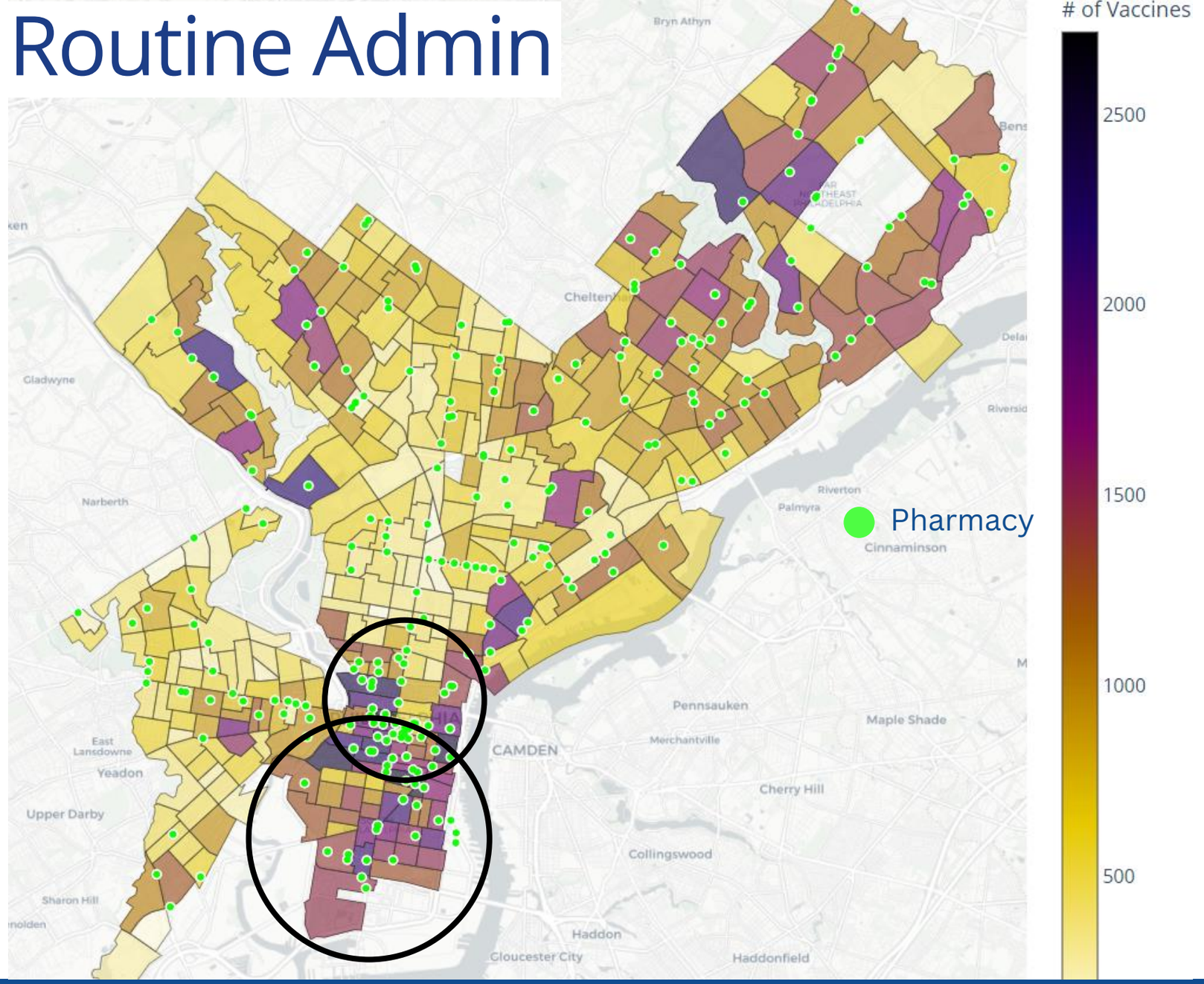
COVID Admin


Bryn Athyn
Bensalem
Cheltenham
Delanco
Gladwyne
Riverside
Narberth
Riverton
Palmyra
Pharmacy
Cinnaminson
Moorestown
Pennsauken
Maple Shade
East Lansdowne
Yeadon
CAMDEN
Merchantville
Cherry Hill
Upper Darby
Collingswood
Sharon Hill
Haddon
Gloucester City
Haddonfield
# of Vaccines
8000
7000
6000
5000
4000
3000
2000
1000

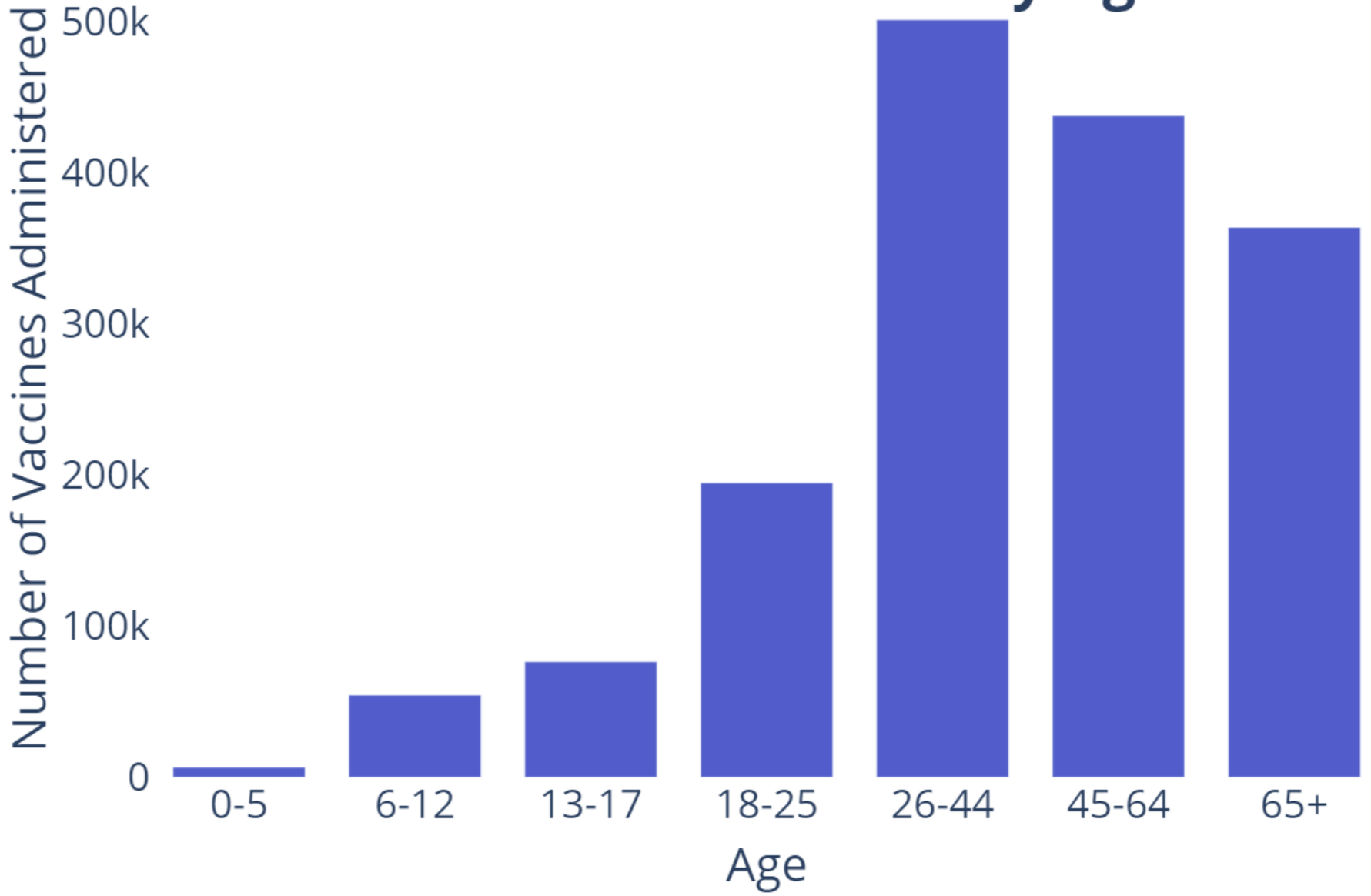
Routine Admin



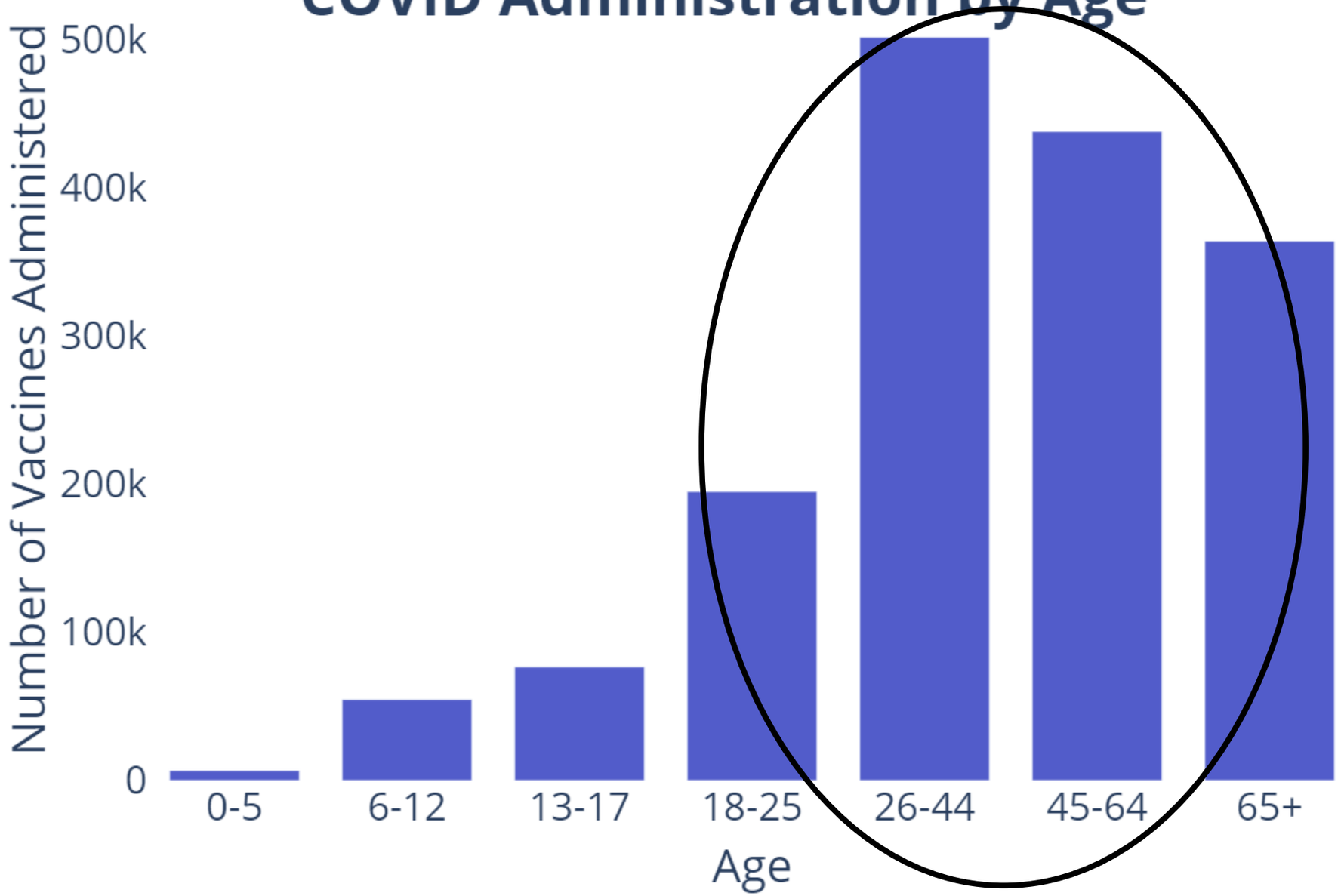
Routine Admin



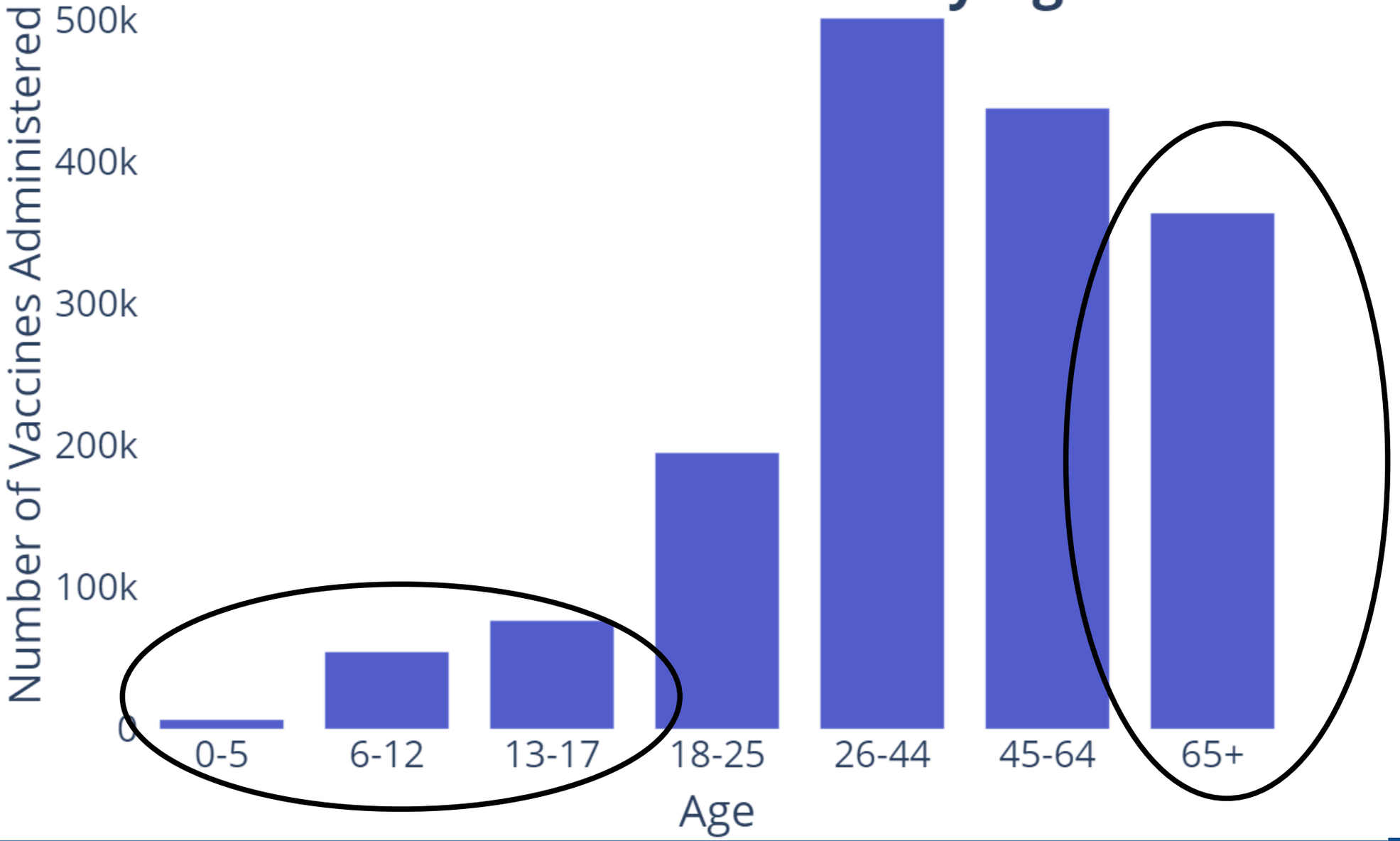
COVID Administration by Age



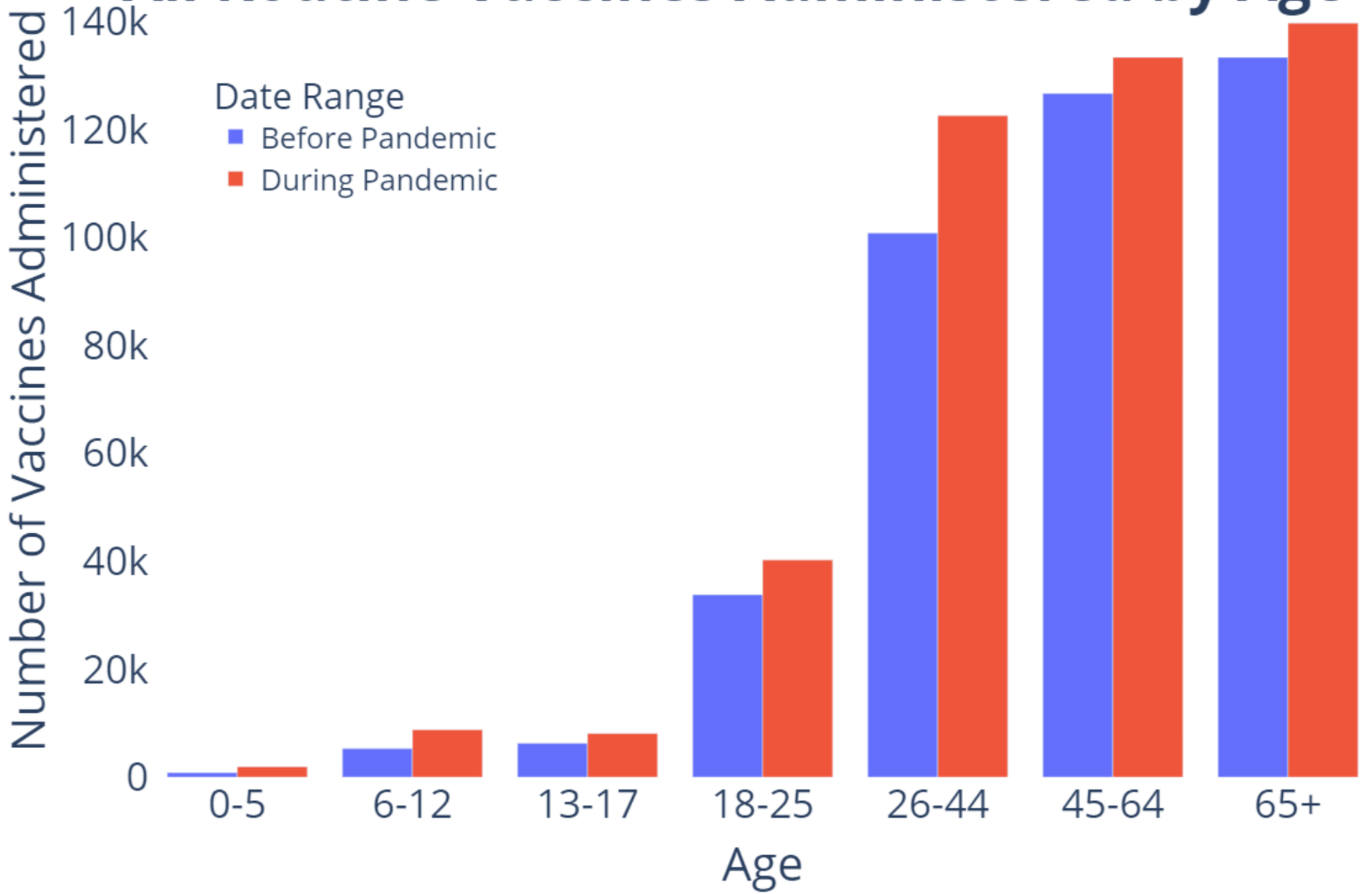
COVID Administration by Age



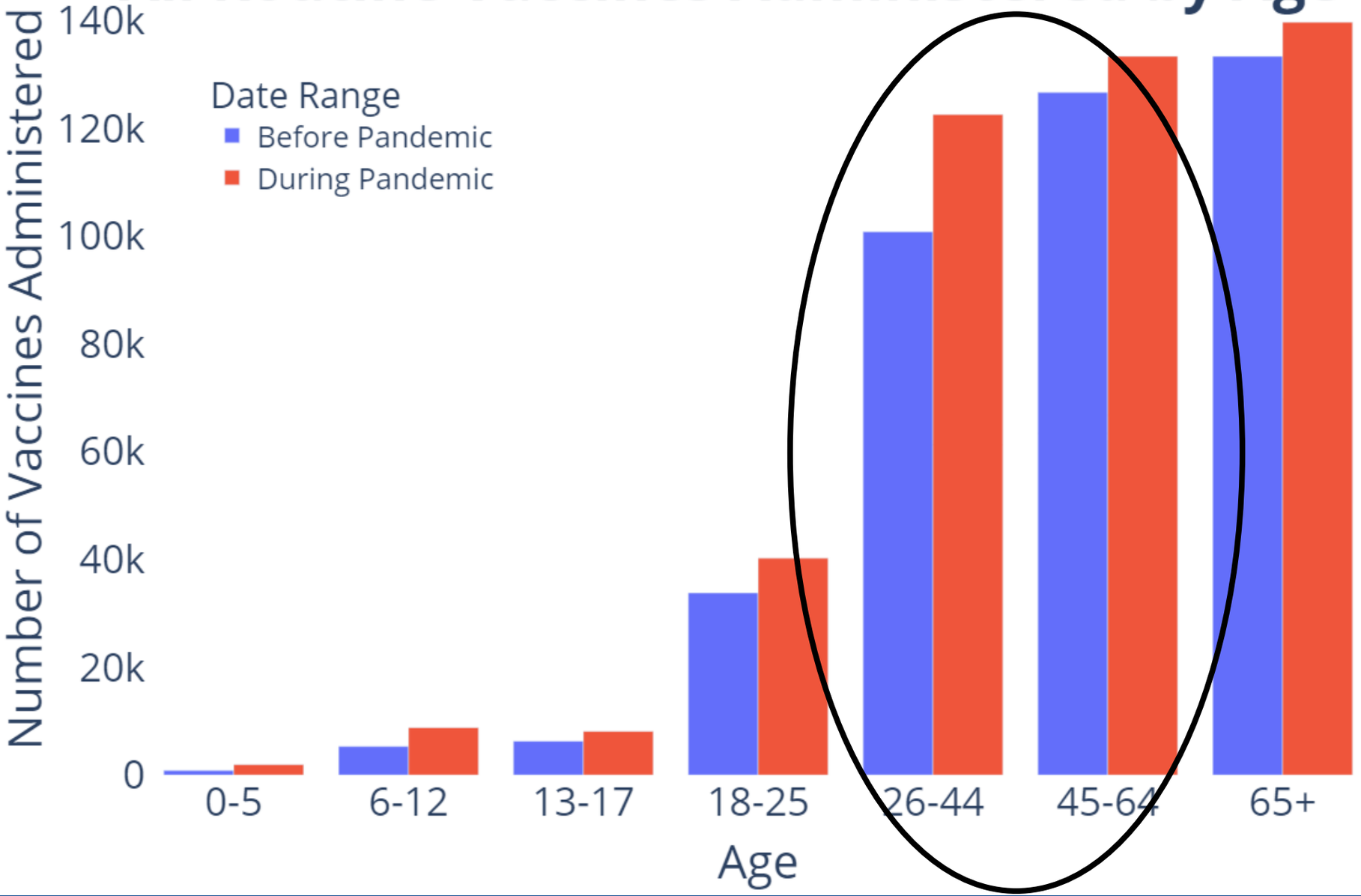
COVID Administration by Age



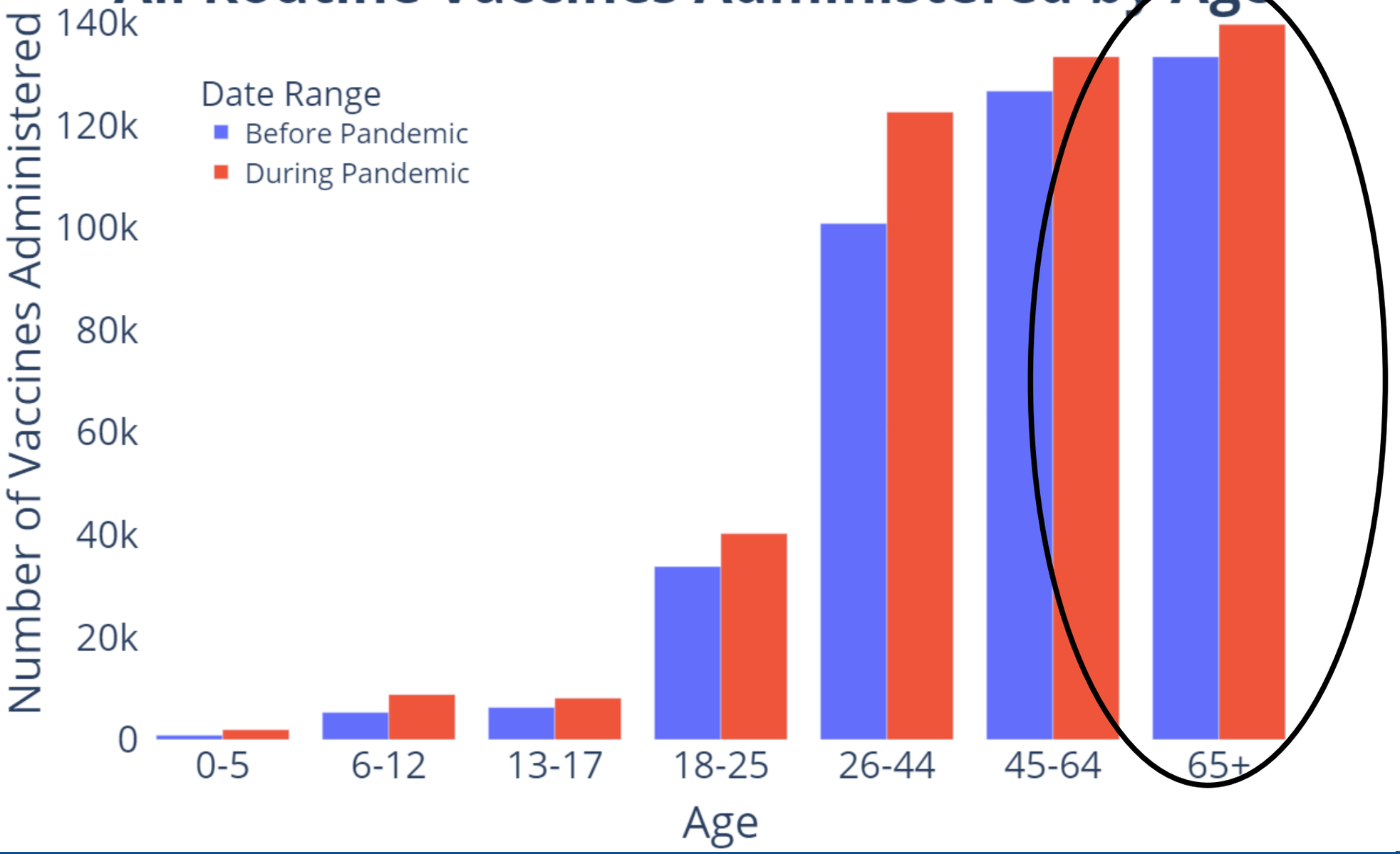
All Routine Vaccines Administered by Age



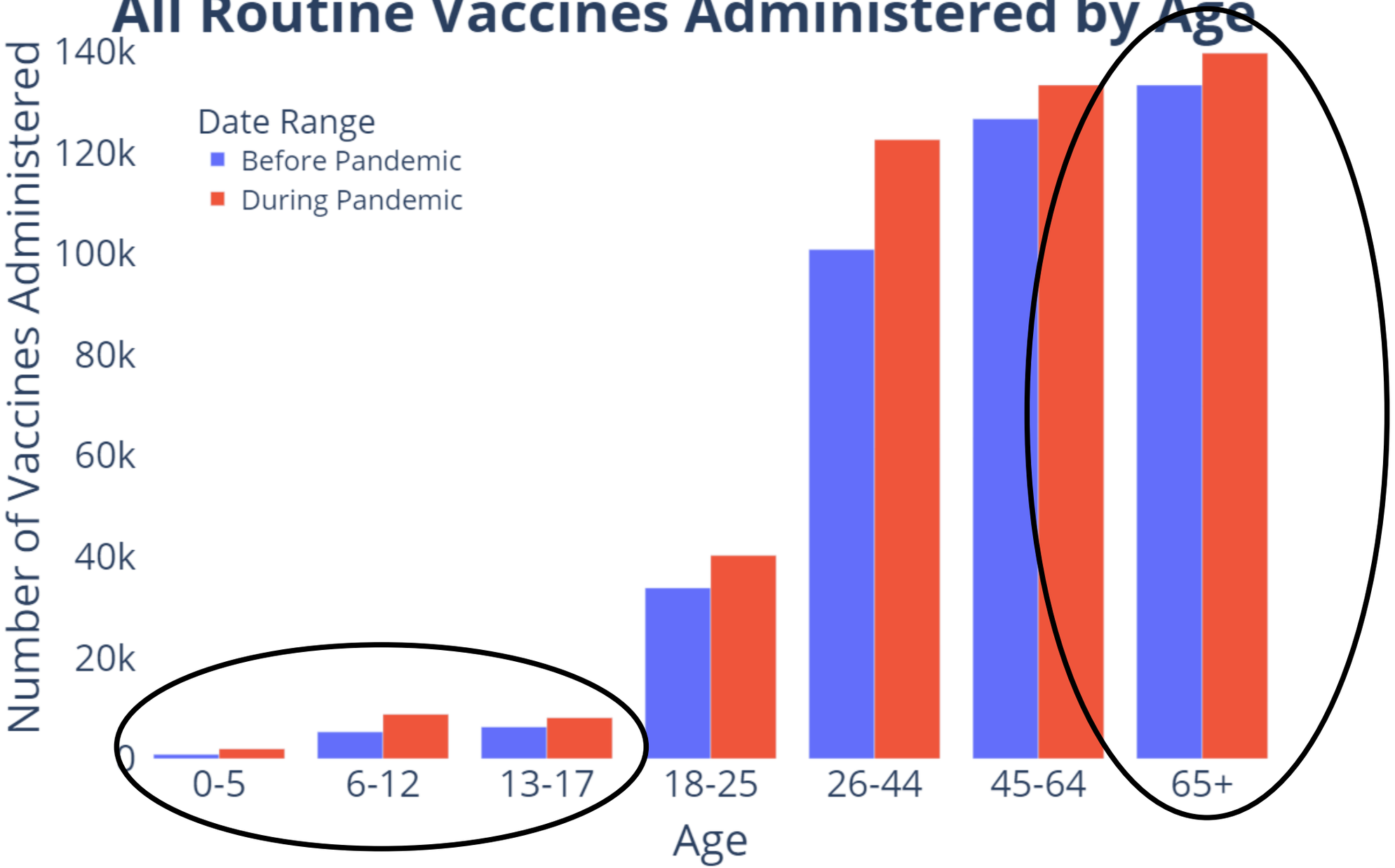
All Routine Vaccines Administered by Age



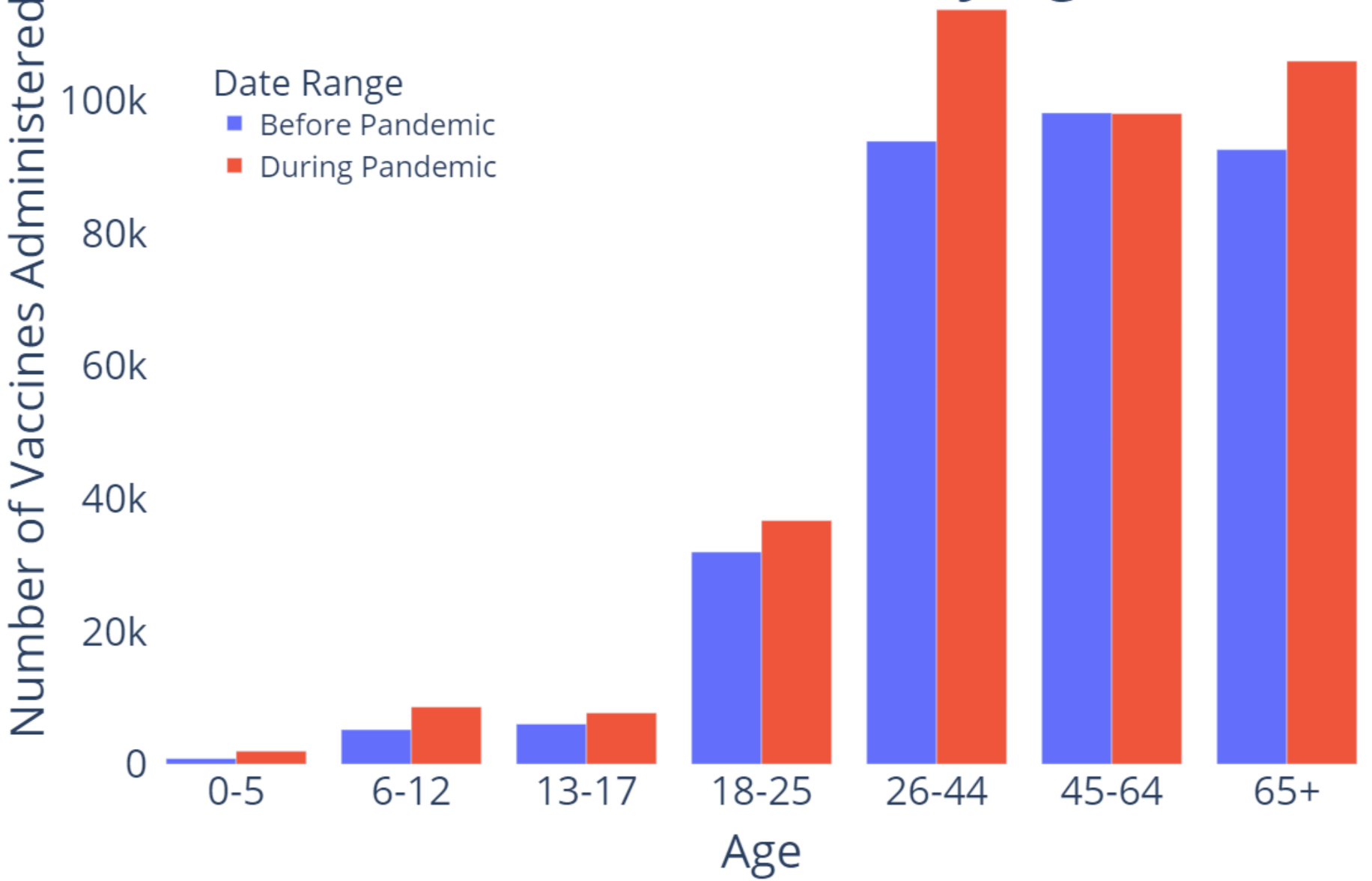
All Routine Vaccines Administered by Age



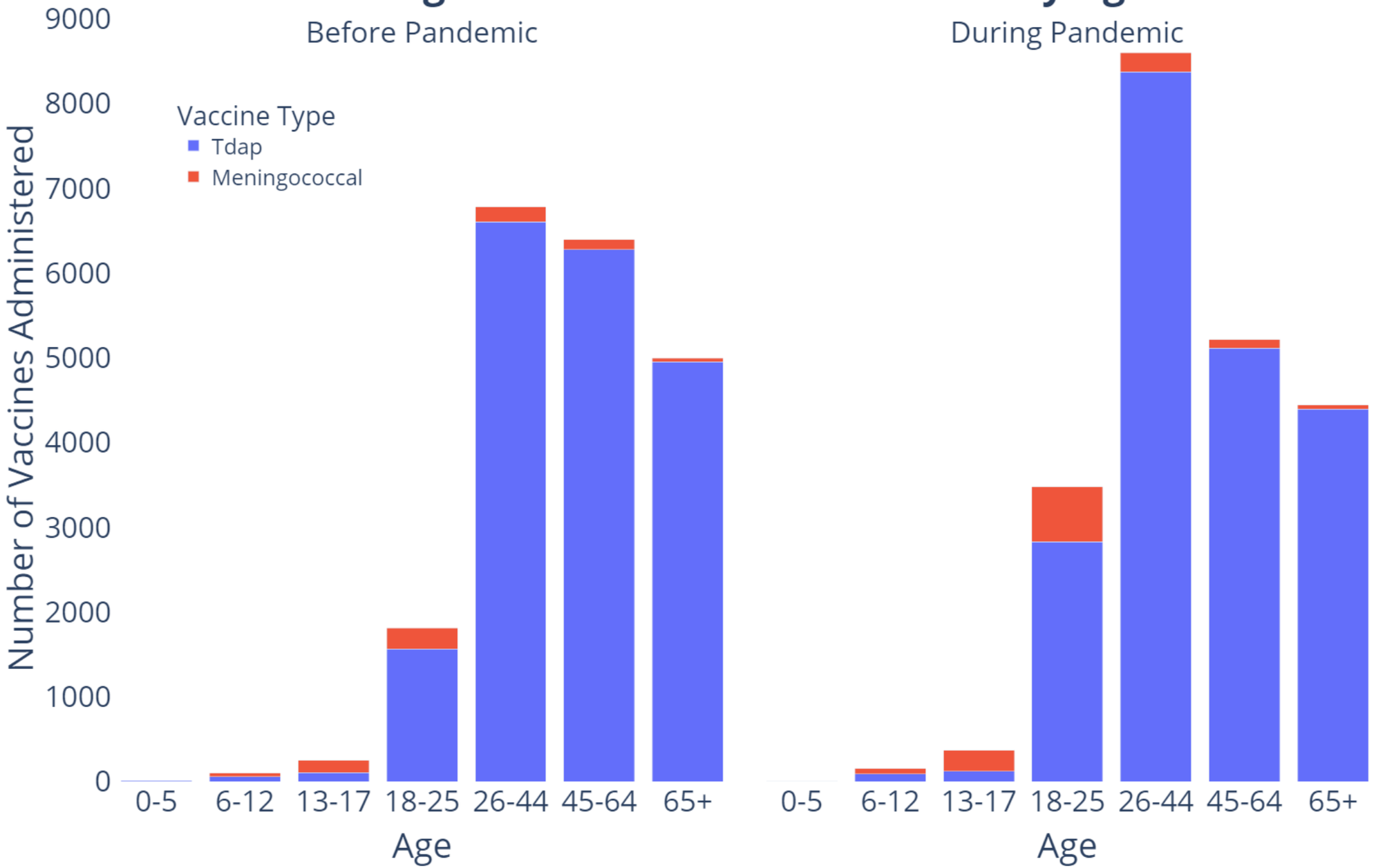
All Routine Vaccines Administered by Age



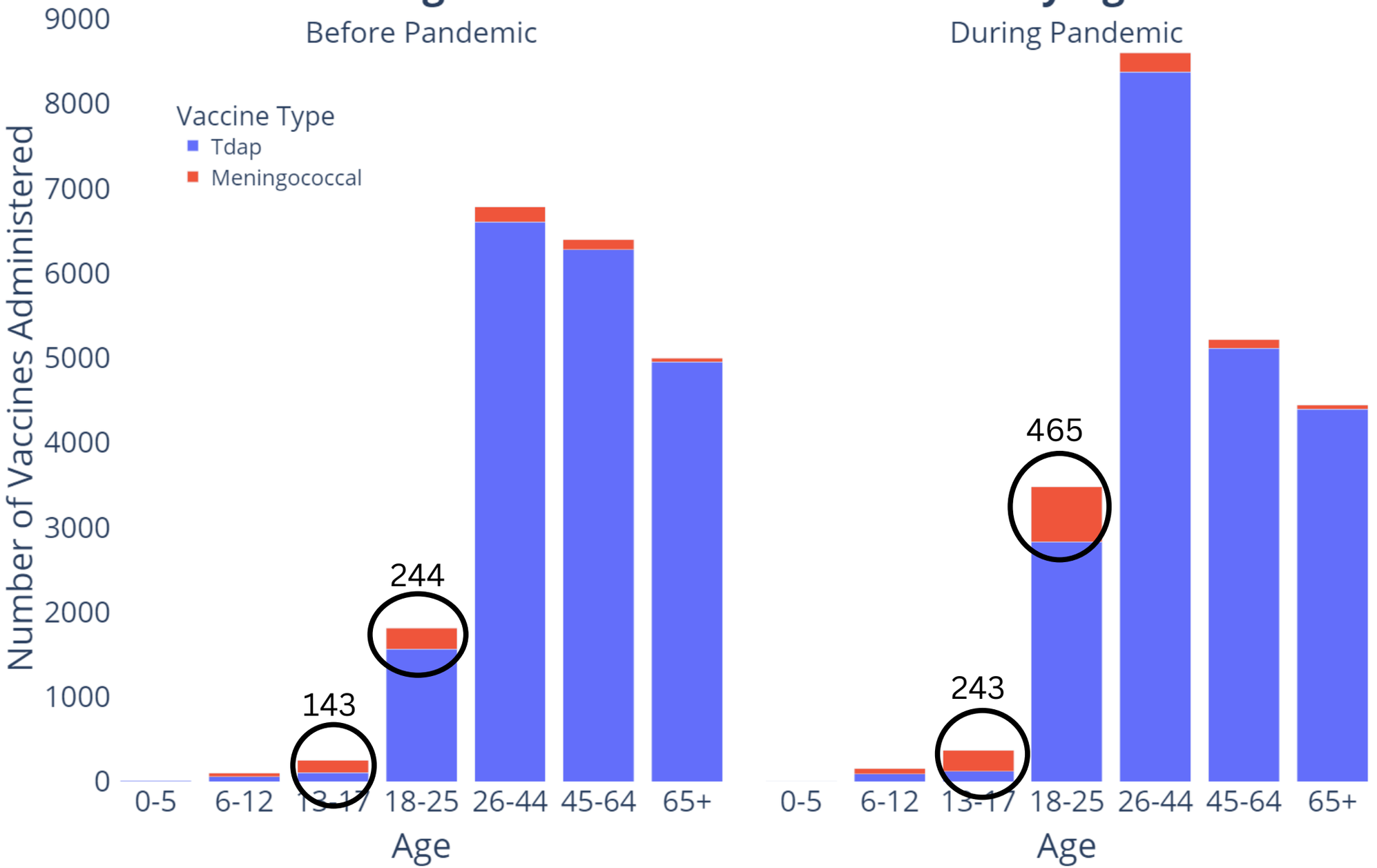
Flu Administration by Age



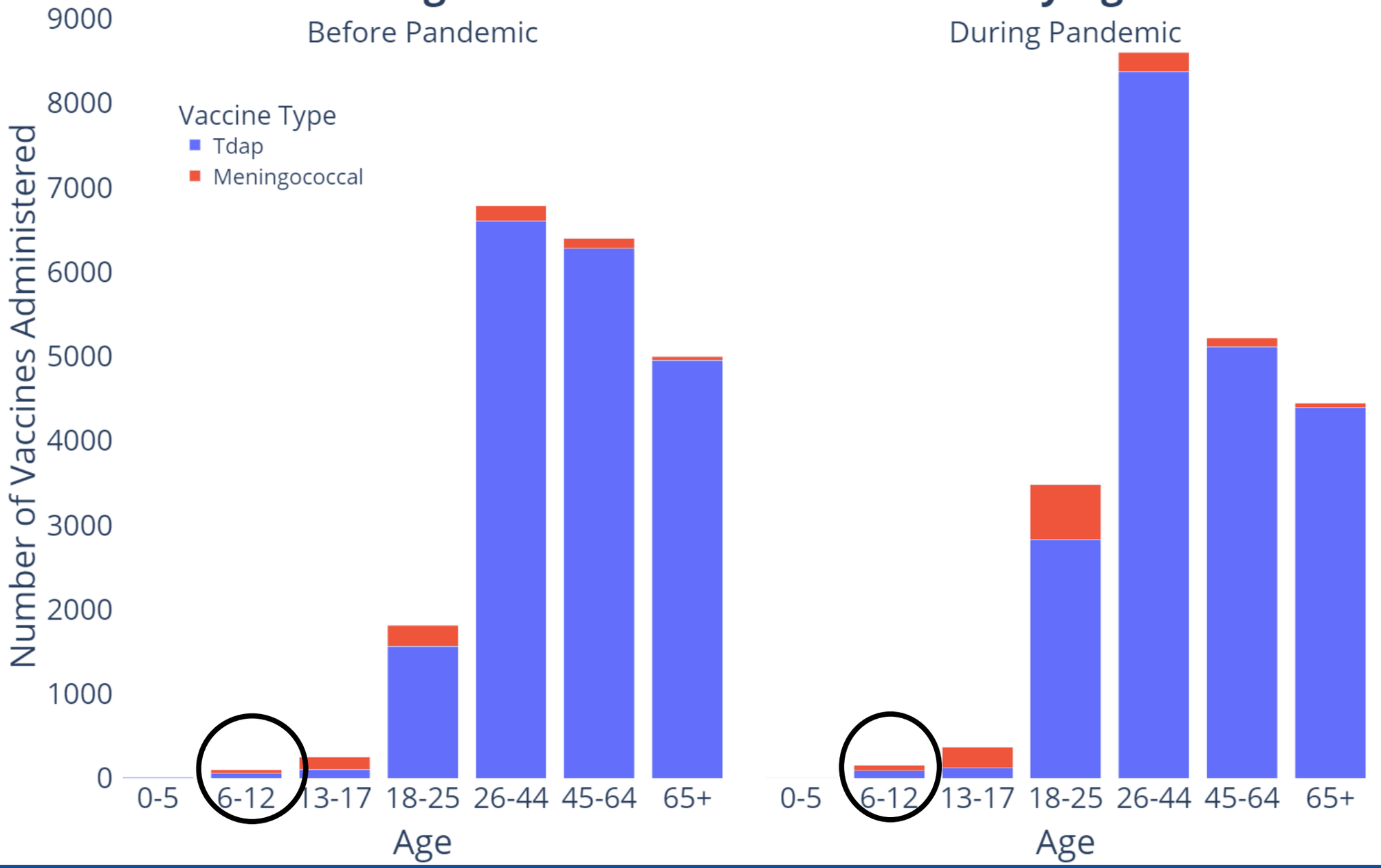
Meningoccal/Tetanus Administered by Age



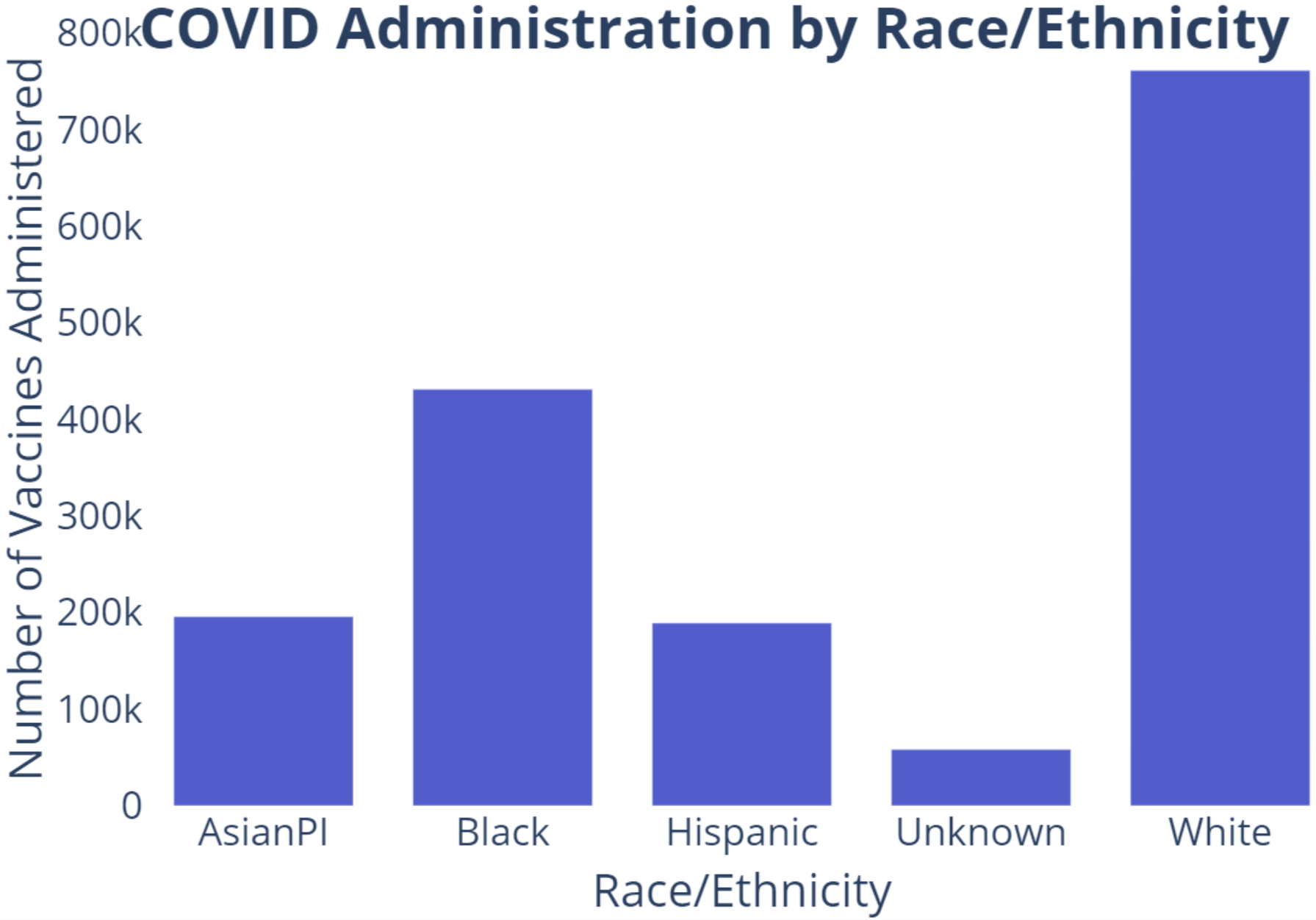
Meningoccal/Tetanus Administered by Age



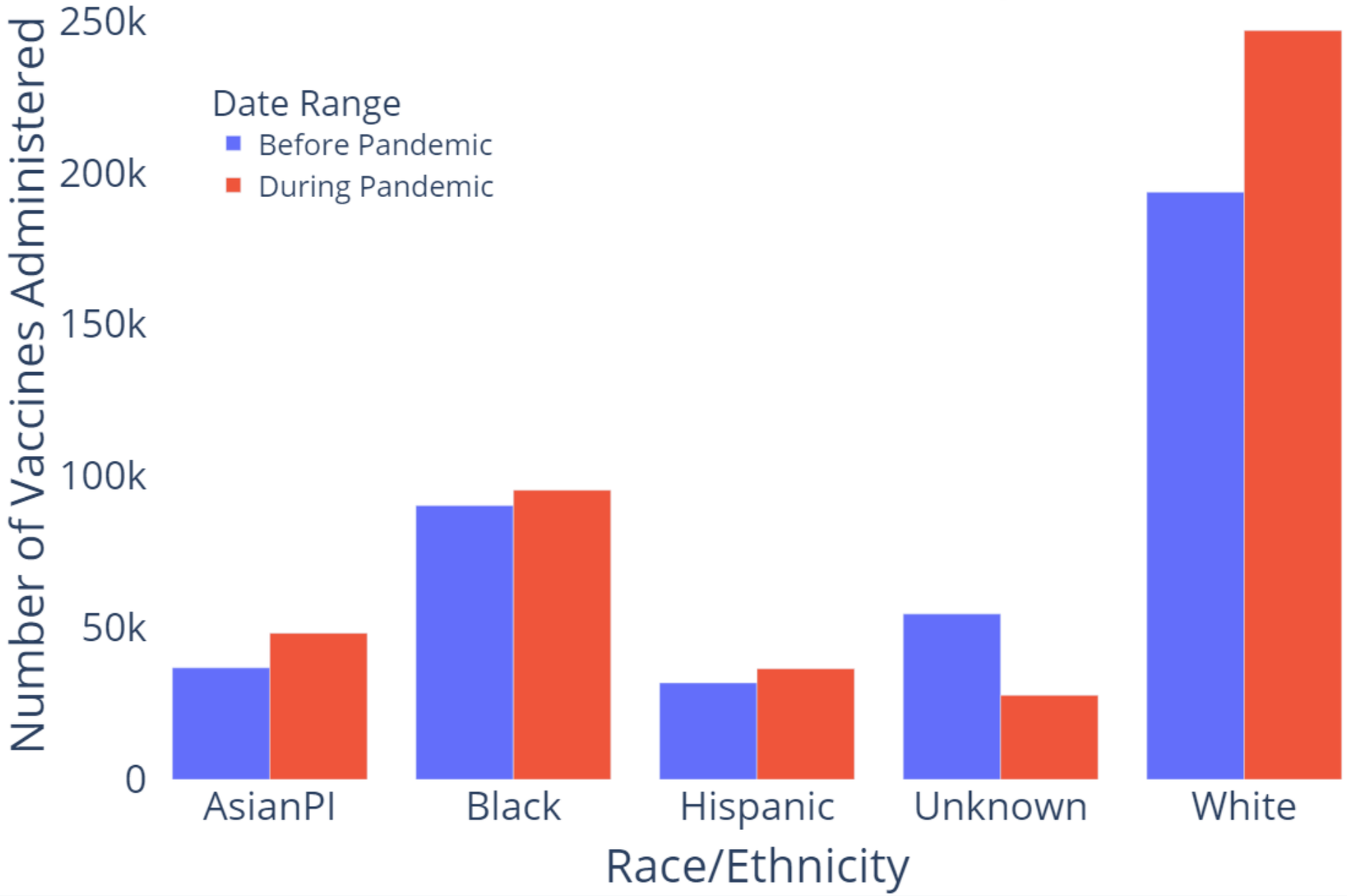
Meningoccal/Tetanus Administered by Age



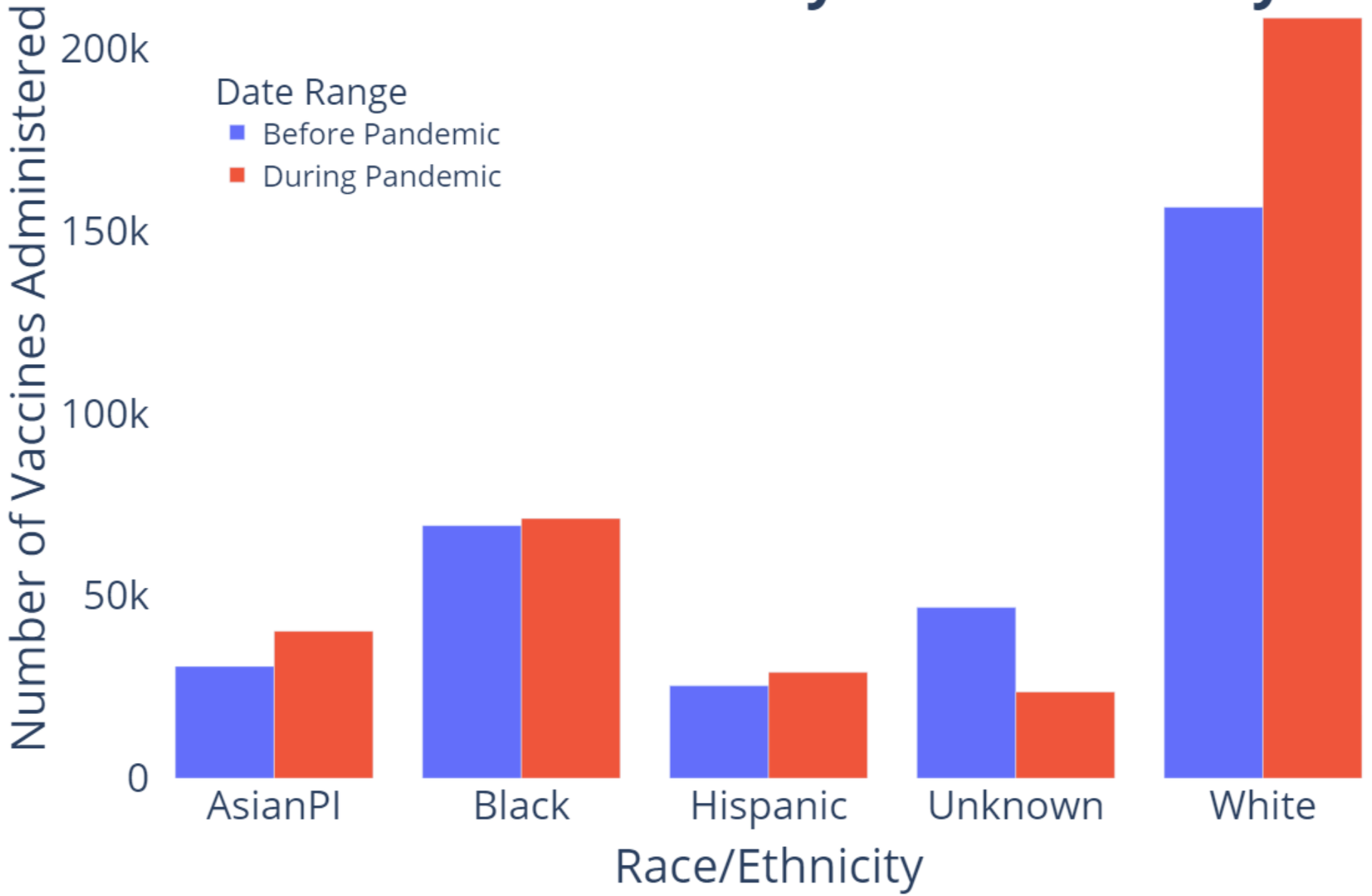
COVID Administration by Race/Ethnicity



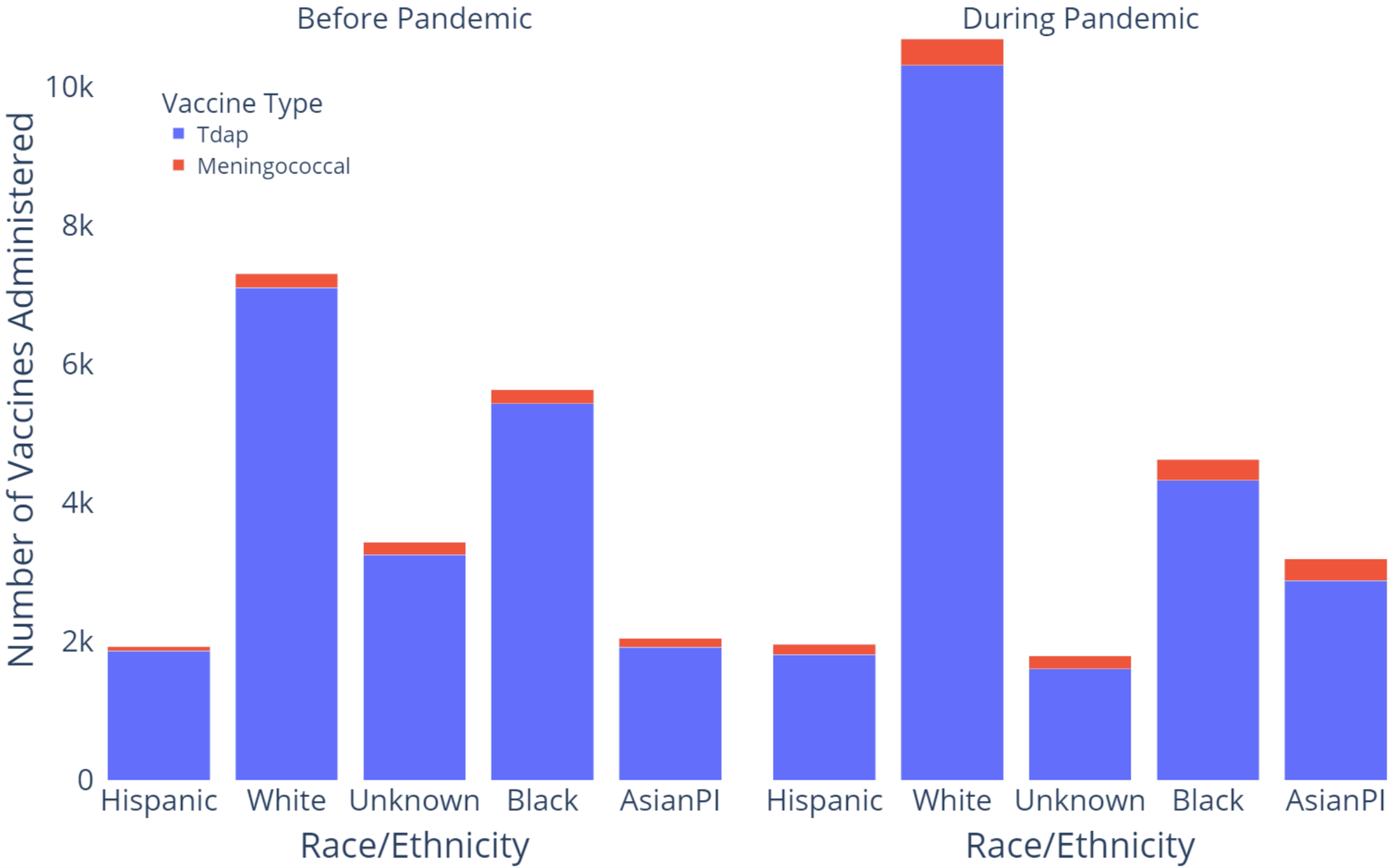
All Routine Vaccines Administered by Race/Ethnicity



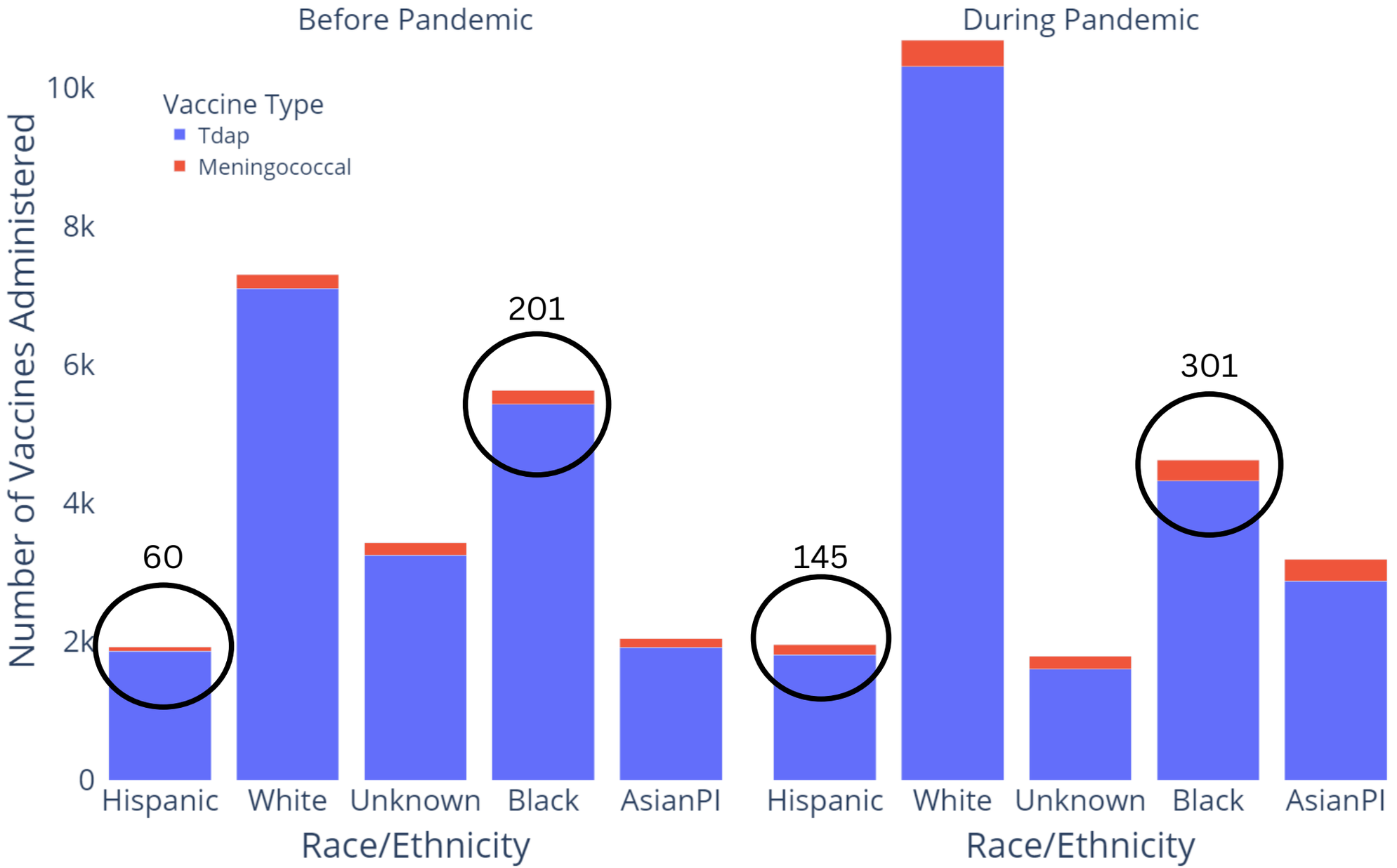
Flu Administration by Race/Ethnicity



Meningoccal/Tetanus Administered by Race/Ethnicity



Meningoccal/Tetanus Administered by Race/Ethnicity



What did we learn?

- Pharmacies administered 42% of COVID vaccinations in Philadelphia, and there was a 12% increase in routine vaccinations during the pandemic

- Pharmacies most popular among young/middle aged adults

- Flu saw greatest total increase, but meningococcal had largest percentage increase (72%)

- Racial disparities small, but should be addressed

Conclusion

- Pharmacies played crucial role in COVID vaccination campaign
- Onboarding pharmacies, and the COVID vaccination campaign, led to an increase in routine vaccinations
- Pharmacies are a good option for working/younger adults
- Not popular for younger children
- Expanding adult pharmacy vaccination could increase adult vaccination rates

Works Cited

1. Richardson, W. M., & Wertheimer, A. I. (2019). A review of the pharmacist as Vaccinator. INNOVATIONS in Pharmacy, 10(3), 4. https://doi.org/10.24926/iip.v10i3.940

2. Goad, J. A., Taitel, M. S., Fensterheim, L. E., & Cannon, A. E. (2013). Vaccinations administered during off-clinic hours at a national community pharmacy: implications for increasing patient access and convenience. Annals of family medicine, 11(5), 429–436. https://doi.org/10.1370/afm.1542

3. Crawford, N. D., Blaney, S., Amesty, S., Rivera, A. V., Turner, A. K., Ompad, D. C., & Fuller, C. M. (2011). Individual- and neighborhood-level characteristics associated with support of In-pharmacy vaccination among ESAP-registered pharmacies: pharmacists' role in reducing racial/ethnic disparities in influenza vaccinations in New York City. Journal of urban health : bulletin of the New York Academy of Medicine, 88(1), 176–185. https://doi.org/10.1007/s11524-010-9541-6

Works Cited

4. American Academy of Pediatrics opposes HHS action on childhood vaccines; calls it 'incredibly misguided'. Home. (n.d.). Retrieved March 13, 2023, from https://www.aap.org/en/news-room/news-releases/aap/2020/american-academy-of-pediatrics-opposes-hhs-action-on-childhood-vaccines-calls-it-incredibly-misguided/

5. Wang J, Ford LJ, Wingate L, et al. Effect of pharmacist intervention on herpes zoster vaccination in community pharmacies. J Am Pharm Assoc (2003) 2013;53(1):46–53.