

# The Role of Community-Based Pharmacy Interventions in Increasing Vaccine Access

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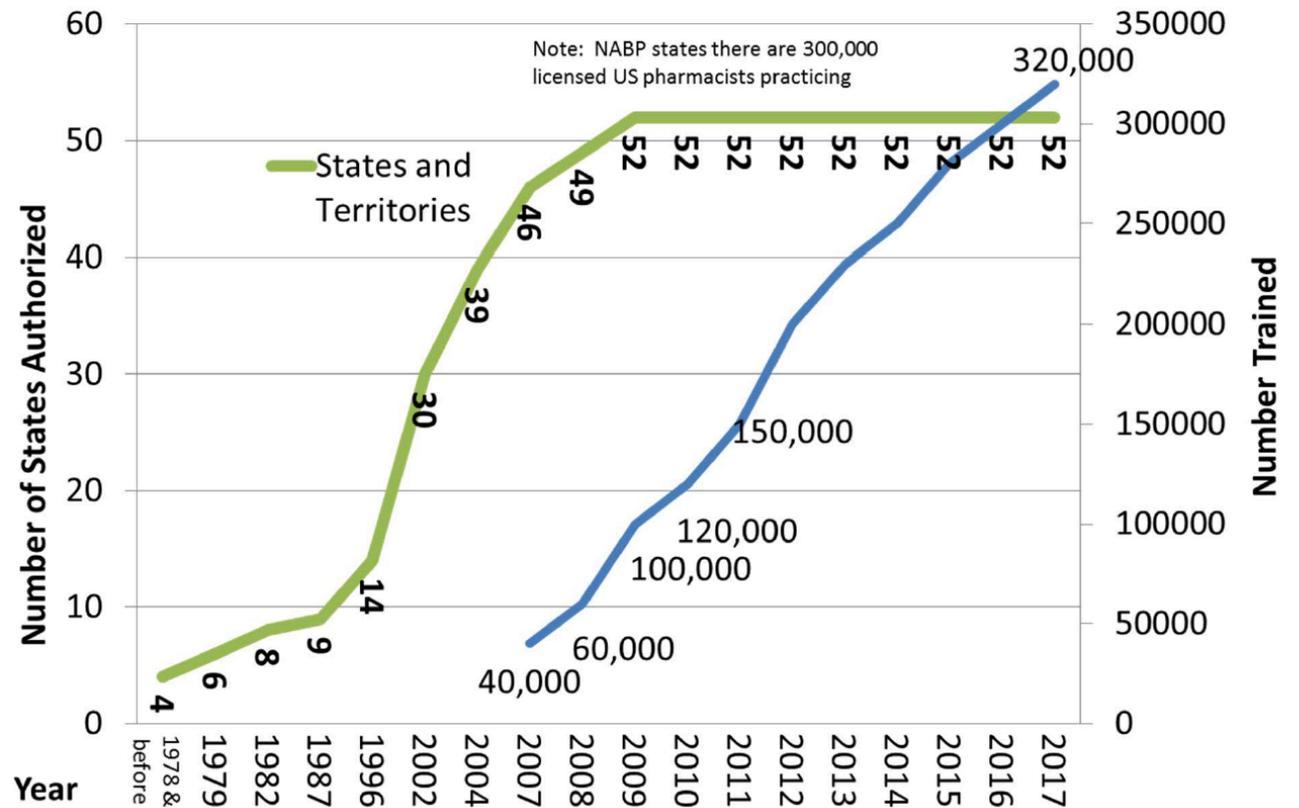


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- **1993:** HHS asks APhA to define the role of the pharmacist in a providing vaccines to people
- **1996:** APhA creates the Pharmacy-based Immunization Training program
- **2009:** All states allow pharmacists to administer influenza vaccine
- **2020:** All states allow pharmacists to administer:
  - Influenza
  - Meningococcal
  - Td/Tdap
  - Zoster
  - Pneumococcal
  - **47 states allow any vaccine**

**Number of States Authorizing Pharmacists to Administer Influenza Vaccine  
&  
Number of Pharmacists Trained to Administer Vaccines**

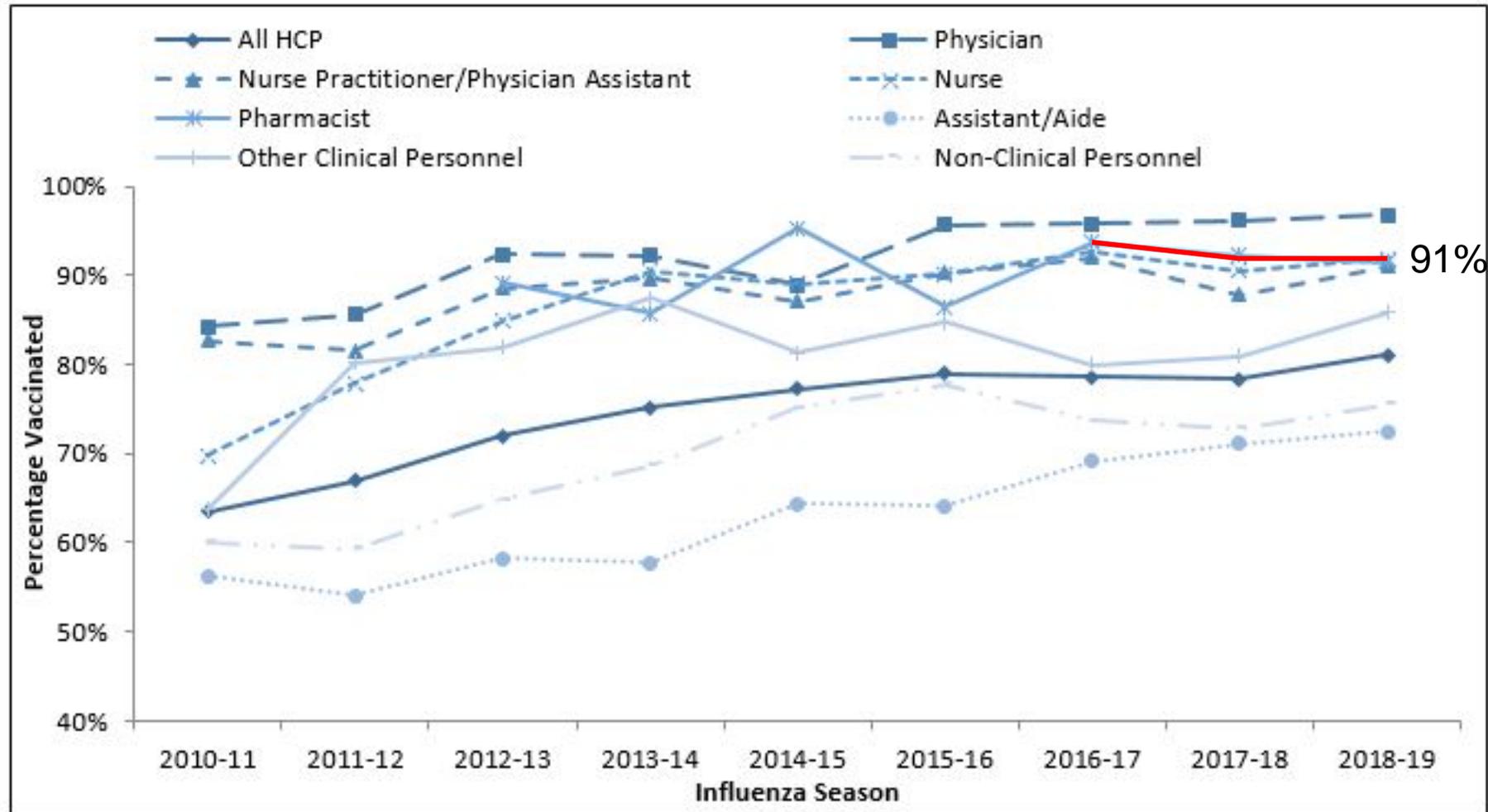


Updated December 2017



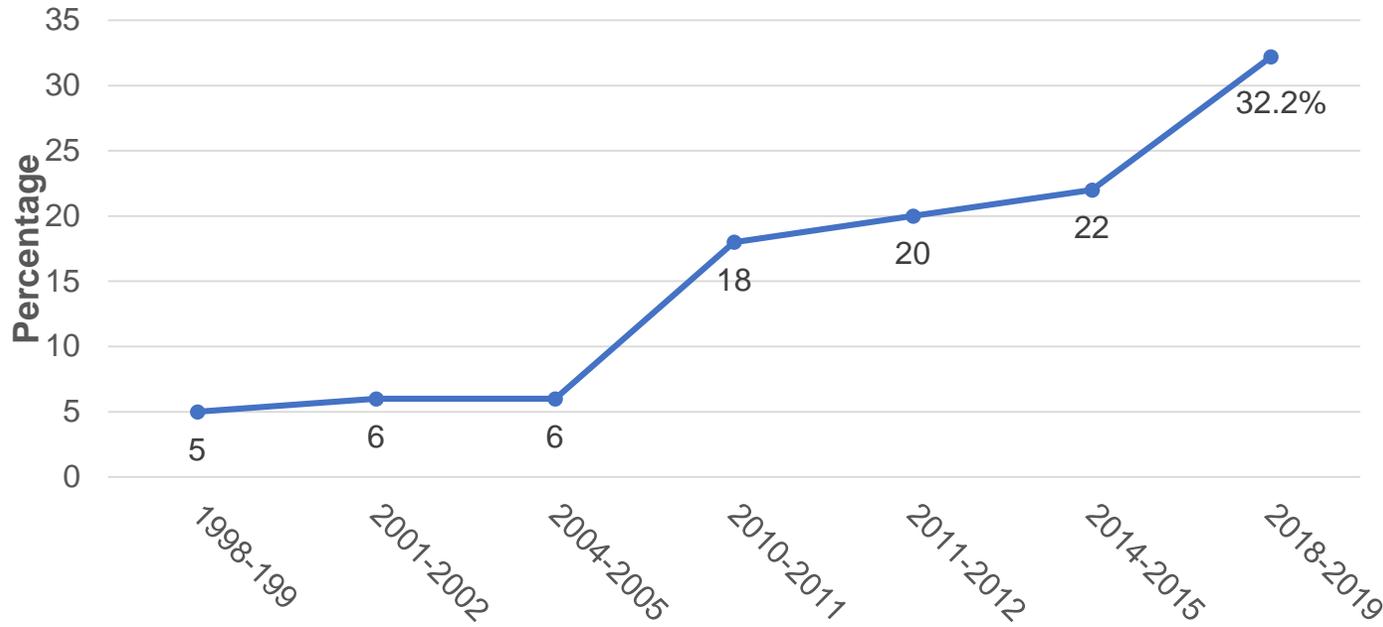
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# Healthcare Providers: % Vaccinated against Flu

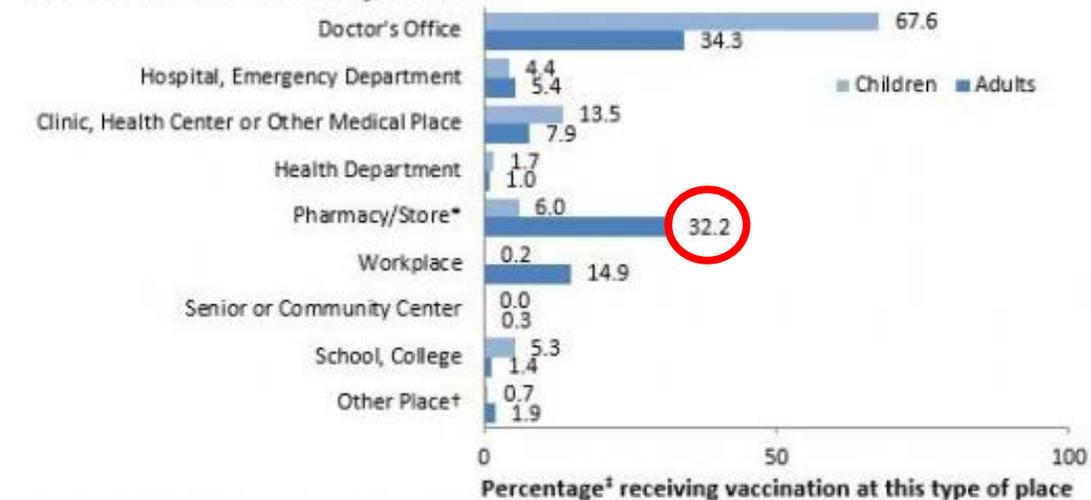


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# Percent of Influenza Vaccine Administered at the Pharmacy: 1998 - 2019



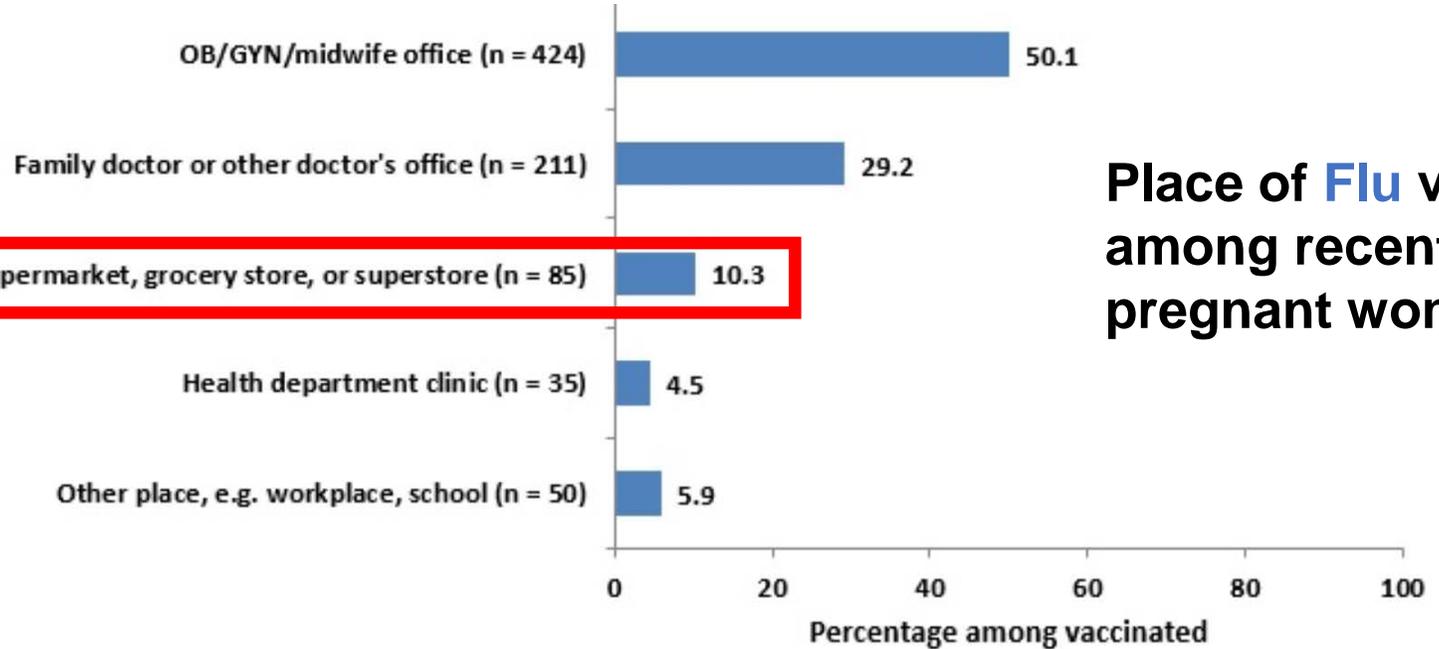
**Figure 5. Place of Flu Vaccination for Children and Adults Among Those Vaccinated Early, 2018–19**



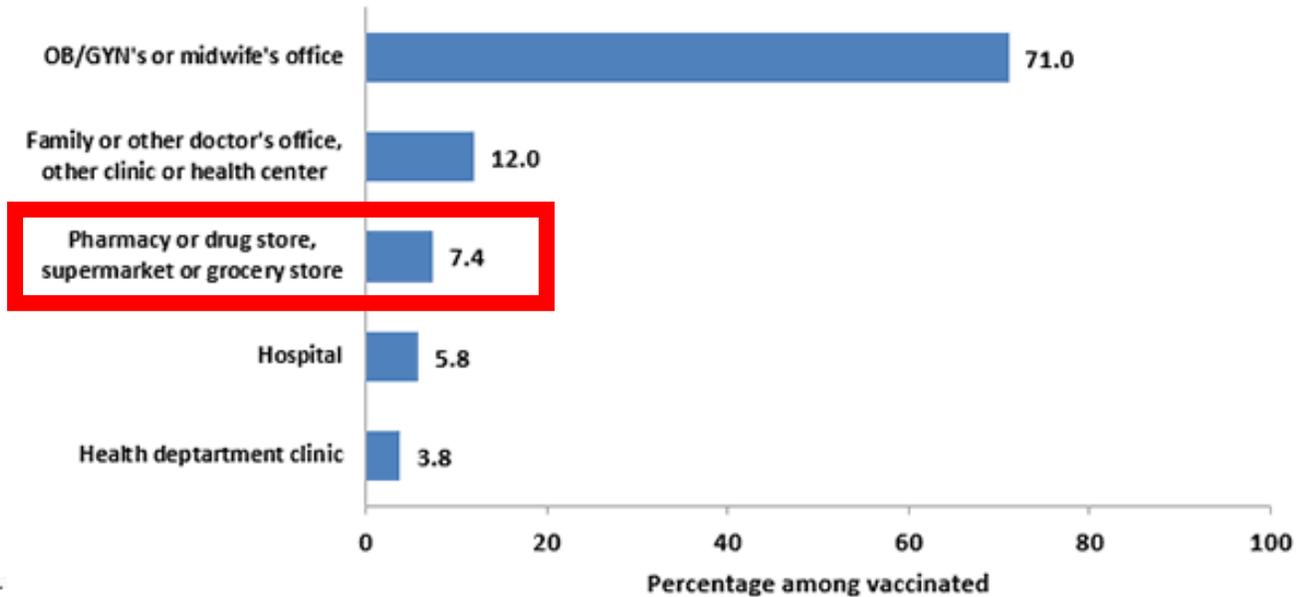
Source: Behavioral Risk Factor Surveillance System (BRFSS); CDC, Aug 1 – Nov 8, 2017 Internet Panel Survey



## Place of Flu vaccination among recently pregnant women



## Place of Tdap vaccination among recently pregnant women



# Pharmacy and Extended Hours

- Retrospective database analysis 2011-2012
- 6.2 million doses of vaccine administered at a chain pharmacy
- After-hours access (after 6 PM, before 9 AM)
  - 30% of the population
  - 85% influenza, 15% other vaccines
  - 10% given in the evening
- Demographics
  - 46% were  $\geq 65$  years, 3.3% were  $\leq 18$  years
  - Non-Clinic Hours
    - After-hours  $\rightarrow$  22% were  $\geq 65$  years
    - After-hours  $\rightarrow$  51% were  $\leq 18$  years

Goad J. Ann Fam Med 2013;429-436. doi:10.1370/afm.1542

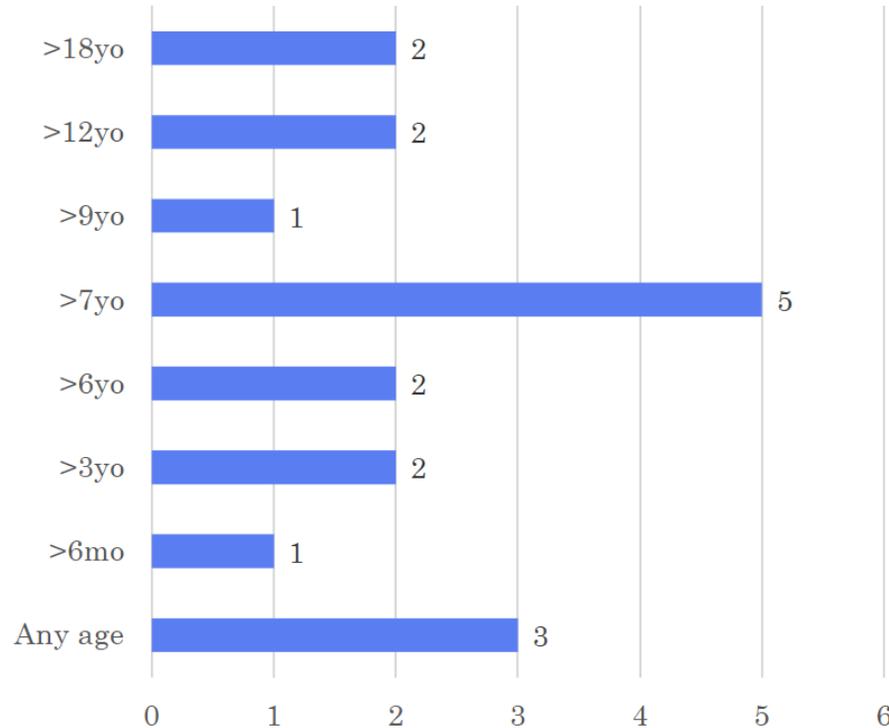


Time of Vaccination	Number	Percent
<b>Traditional clinic hours<sup>a</sup></b>	4,344,050	69.50
<b>Off-clinic hours</b>	1,906,352	30.50
Evenings <sup>b</sup>	636,973	10.19
Weekends	1,087,028	17.39
Federal holidays <sup>c</sup>	182,351	2.92
Labor Day	18,872	0.30
Columbus Day	91,008	1.46
Veterans Day	42,607	0.68
Thanksgiving Day	1,436	0.02
Christmas Day	6,808	0.11
New Year's Day	9,085	0.15
Birthday of Martin Luther King, Jr	6,592	0.11
Washington's Birthday	3,614	0.06
Memorial Day	1,165	0.02
Independence Day	1,164	0.02
<b>Total</b>	6,250,402	100.00

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# INFLUENZA - PHARMACISTS

## STATE AUTHORIZED



<b>≥18yo</b>	SD, WV
<b>≥12yo</b>	MT, SC
<b>≥9yo</b>	MD
<b>≥7yo</b>	LA, ME, OR, TX, WY
<b>≥6yo</b>	ID, WI
<b>≥3yo</b>	AZ, CA
<b>≥6mo</b>	VA
<b>Any age</b>	AK, NH, NM

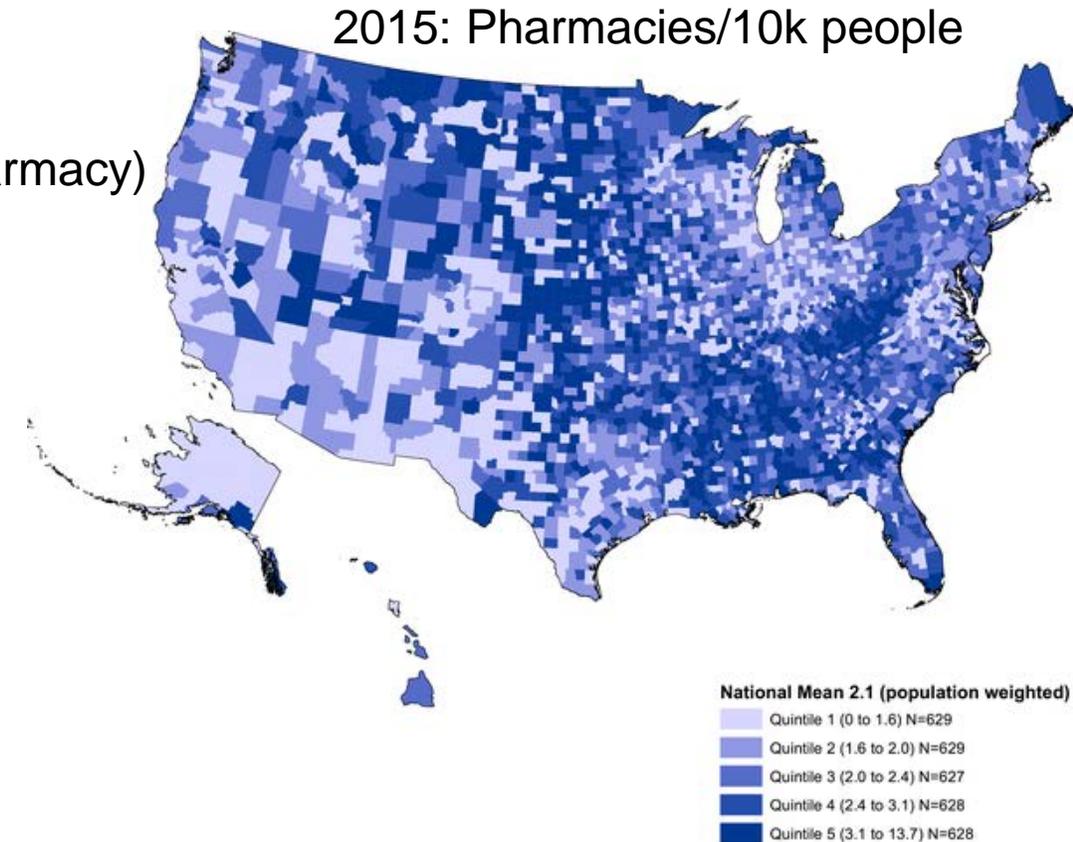
18  
States

Note: Authority comes from statute and/or regulation from BOP or Public Health

Updated June 2020 | Based on APhA/NASPA Survey of State IZ Laws/Rules

# The Case for Pharmacy-Based Immunization

- Pharmacy in the U.S.<sup>1,2</sup>
  - 88,181 (approximately 50:50 Chain to Independent)
  - >300k licensed pharmacists (50% work in community pharmacy)
  - 86% of the population live within 5 miles of a pharmacy
- Access
  - All 50 states allow pharmacists to give vaccines
  - Pharmacies have extended, “off clinic” hours
- Training
  - Accreditation of SOPs require immunization training
  - National CDC recognized training program



<sup>1</sup>"U.S. National Pharmacy Market Summary". OneKey by IQVIA. July 2019.

<sup>2</sup> 2019 National Pharmacist Workforce Study: Final Report. Jan 10, 2020. PWC.

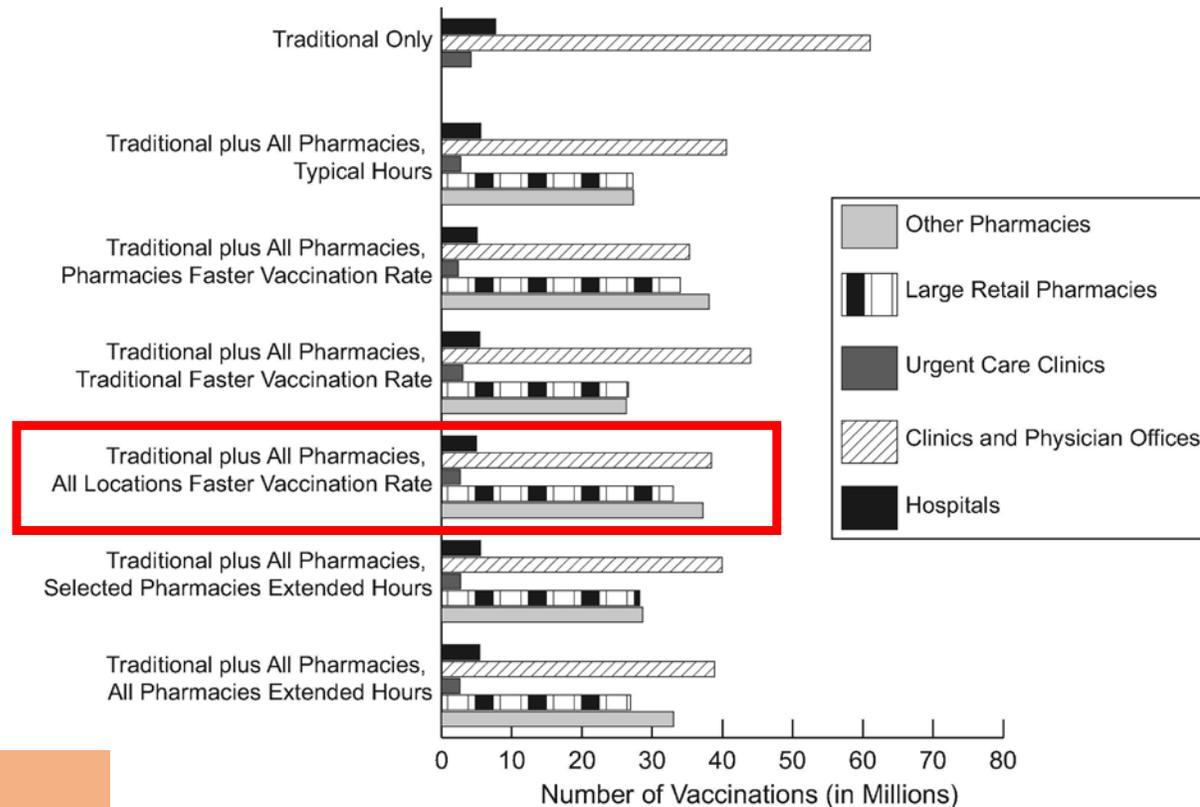
Qato DM, (2017) PLOS ONE 12(8): e0183172.  
<https://doi.org/10.1371/journal.pone.0183172>

# Final Thoughts: Pandemic Potential

## Simulated Influenza Pandemic<sup>1</sup>

- Multiple providers reduce stress on any given system
- Start early & max IZ rate to maximize benefit
- Pharmacies + traditional locations can increase vaccination coverage (33.7% increase)
- Avoid up to 23.7 million symptomatic influenza cases
- Cost-savings up to \$2.8 billion to third-party payers and \$99.8 billion to society

**2009 H1N1:** 12/2009-2/2010, the CDC distributed 5 million doses of 2009 H1N1 vaccine to pharmacy chains; 10% of the US received their dose in a pharmacy<sup>2</sup>



<sup>1</sup>Bartsch S. *Vaccine*. 2018. 36:7054–7063

<sup>2</sup>Koonin, L. *Disaster Medicine and Public Health Preparedness*, 5(4), 253-255. doi:10.1001/dmp.2011.83

# Thank You

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