



## INTRODUCTION

- The Walgreens Real World Evidence (RWE) Clinical Trials business launched in 2022.
- Walgreens has nearly 9,000 stores, with more than 131 million pharmacy patients.
- Many of Walgreens' stores are in socially vulnerable areas that serve populations traditionally underrepresented in clinical research.
- Walgreens offers respiratory pathogen testing for both SARS-CoV-2 and Influenza (A/B).
- Additionally, Walgreens offers many vaccines including COVID-19 and Influenza that are administered by trained pharmacists.
- Walgreens was able to link data environments and obtain informed consent through direct participant contact for respiratory pathogen testing, vaccine administration and pharmacy data, as well as patient-reported outcomes.
- The federal Public Health Emergency (PHE) for COVID-19 ended on May 11, 2023, and ended payment coverage for SARS-19 testing in the United States for those with insurance.
- SARS-Cov-2 cases previously reported from CDC are no longer available with the ending of the PHE.

## OBJECTIVE

- To utilize retail pharmacy data in monitoring SARS-CoV-2 and Influenza cases, percent positivity, vaccine administration, and trends over time to facilitate and inform both public health monitoring and overall response after the ending of the federal PHE.

## METHODS

- Data included SARS-CoV-2 and influenza tests, test type, and vaccines administered. Weekly testing volume, type of test administered (Multiplex, PCR, ID Now), and weekly % positive by test type was described by Epi week for 2023. Vaccines administered by Epi week were described for 2021 through 2023. Influenza vaccines administration by Epi week were described for calendar year 2023.

## RESULTS

- Weekly testing peaked in week 1 of 2023 with approximately 40,000 ID Now tests and 19,000 PCR tests (N=59,000). No multiplex tests were administered. **(Figure 1)**
- Testing volume decreased for ID Now and PCR tests from week 1 through week 20 (total volume below 3,000 per week). **(Figure 1)**
- An uptick in ID Now Rapid Test occurred from weeks 30 through 36; however, testing volume shifted to multiplex in week 37 and with peak volume in week 50 at 39,000. PCR and ID Now fell below 2000 tests per week after week 37. **(Figure 1) (Table 1)**
- Percent positivity varied by test type. Peak positivity for PCR (50%) and Multiplex (30%) occurred during week 49. ID Now was observed at 35% during week 49. **(Figure 2) (Table 1)**
- COVID-19 vaccination distributions were higher in 2021 (50,949,000) compared to 2022 (20,164,000) and 2023 (9,278,000). **(Figure 3)**
- A marked increase was observed in 2023 with the availability of the XBB variant vaccine reaching nearly 1 million doses distributed for weeks 38 through 40. **(Figure 3)**
- The weekly volume rapidly decreased to 100,000 per week by week 52. Weekly dispensing for the XBB formulation trailed the weekly dispensing on influenza vaccine from week 41 through week 52. **(Figure 3)**

Figure 1. 2023 Weekly Covid and Multiplex\*, Tests by Type (000s)

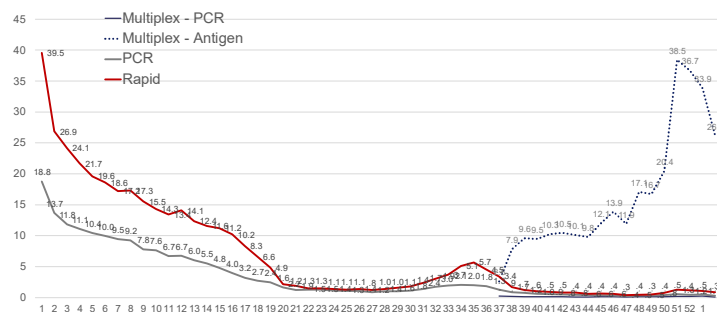
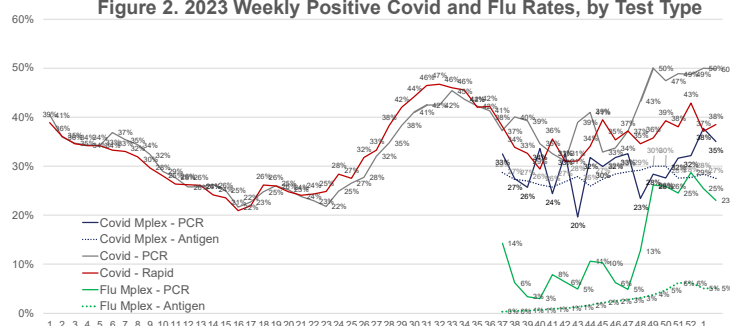


Figure 2. 2023 Weekly Positive Covid and Flu Rates, by Test Type

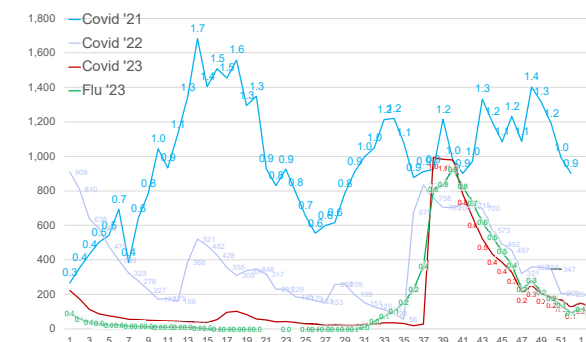


## RESULTS (Cont.)

Table 1. Total Positive Patients

| Week | Covid           |             |     |       |             | Flu         |                 |
|------|-----------------|-------------|-----|-------|-------------|-------------|-----------------|
|      | Mplex - Antigen | Mplex - PCR | PCR | Rapid | PCR + Rapid | Mplex - PCR | Mplex - Antigen |
| 37   | 751             | 91          | 471 | 1,300 | 1,862       | 40          | <10             |
| 38   | 2,144           | 53          | 344 | 578   | 975         | 12          | 37              |
| 39   | 2,598           | 38          | 294 | 406   | 738         | <10         | 53              |
| 40   | 2,493           | 45          | 211 | 293   | 549         | <10         | 65              |
| 41   | 2,639           | 31          | 172 | 317   | 520         | 10          | 91              |
| 42   | 2,814           | 41          | 151 | 251   | 443         | <10         | 102             |
| 43   | 2,826           | 20          | 167 | 245   | 432         | <10         | 127             |
| 44   | 2,542           | 33          | 172 | 211   | 416         | 11          | 161             |
| 45   | 3,298           | 35          | 133 | 253   | 421         | 12          | 258             |
| 46   | 3,953           | 41          | 119 | 205   | 365         | <10         | 339             |
| 47   | 3,443           | 27          | 98  | 159   | 284         | <10         | 328             |
| 48   | 4,987           | 33          | 159 | 157   | 349         | 18          | 540             |
| 49   | 5,021           | 38          | 173 | 169   | 380         | 35          | 629             |
| 50   | 6,135           | 32          | 193 | 298   | 523         | 30          | 964             |
| 51   | 10,595          | 67          | 259 | 484   | 810         | 52          | 2,381           |
| 52   | 10,153          | 56          | 217 | 493   | 766         | 50          | 2,271           |
| 1    | 9,628           | 83          | 257 | 403   | 743         | 56          | 1,712           |
| 2    | 7,188           | 35          | 157 | 337   | 529         | 23          | 1,338           |

Figure 3. Influenza and Covid-19 Vaccines by ISO Week (Millions)



## CONCLUSIONS

Data available from a large retail pharmacy demonstrates differences in weekly testing and test type, percent positivity by test type and vaccine uptake from 2021 through 2023. The ability to monitor outcomes no longer reported by CDC fills an important gap in assessing the epidemiology of SARS-CoV-2 and influenza as well as vaccine uptake in a population representative of the United States.

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