

**PRELIMINARY REPORT ON THE TEXAS VACCINES FOR
CHILDREN (TVFC) PROGRAM**

**IMPACTS OF COVID-19 ON TVFC
VACCINE ADMINISTRATION**



TEXAS
Health and Human
Services

Texas Department of State
Health Services

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Helpful links

Resources for Maintaining Immunization during COVID-19 Pandemic

<https://www.immunizationcoalitions.org/resource-repository/>

Vaccination Guidance During a Pandemic

<https://www.cdc.gov/vaccines/pandemic-guidance/index.html>

Job Aids for Catch-Up Vaccination

<https://www.cdc.gov/vaccines/schedules/hcp/imz/catchup.html>

Why Routine Immunizations are a Must—Even During a Pandemic

<https://astho.org/StatePublicHealth/Why-Routine-Immunizations-are-a-Must-Even-During-a-Pandemic/06-11-20/>

Vaccine abbreviations

DTaP = Diphtheria, tetanus, acellular pertussis (<7 years age)

Tdap = Tetanus, diphtheria, acellular pertussis (≥7 years age)

MMR = Measles, mumps, rubella

MCV4 = Meningococcal conjugate vaccine

HPV = Human papillomavirus vaccine

Polio = Poliovirus vaccine

Hib-FS = Haemophilus influenzae type B, full series

HebB = Hepatitis B

Var = Varicella

PCV = Pneumococcal conjugate vaccine

HepA = Hepatitis A

Rota = Rotavirus

4:3:1:3:3:1:4 = Series of childhood vaccines recommended by 2 years of age by ACIP, including at least 4 doses DTaP, 3 doses Polio, 1 dose MMR, 3-4 doses Hib depending on product used, 3 doses HepB, 1 dose Var, and 4 doses PCV

Background

Maintaining high rates of vaccination coverage (the percent of a given population vaccinated) is critical to protect Texans from vaccine-preventable diseases. Since the COVID-19 pandemic was declared a national emergency on March 13, 2020, a wide variety of stay-at-home measures, school closures, and business closures impacted Texas. Many healthcare providers reported temporary suspension or postponement of wellness visits, including vaccination.

As the COVID-19 pandemic continues, the impact on vaccination programs has become a serious concern, especially for children under two years of age who are vulnerable and require on-time vaccination to be fully protected.

A report¹ released in May 2020 revealed nationwide rates of pediatric vaccine orders and administration were lower in January of 2020 than January of 2019 and declined dramatically from mid-March through mid-April of 2020. The rapid decline began the week after the national emergency declaration and similar declines in orders for adult vaccine were also observed. A report² released in June 2021 determined the number of vaccines administered significantly declined during March-May 2020 while stay-at-home orders were in effect. A recent study⁵ published in October 2021 highlights both the immediate and lagging disruptions in pediatric health care delivery caused by the COVID-19 pandemic as well as potential long-term consequences on pediatric health. The decreased vaccination coverage in young children parallels the decline in other pediatric medical services during the COVID-19 pandemic. After many stay-at-home orders were lifted in June-September 2020, vaccine administration approached pre-pandemic rates, but did not increase to the benchmark necessary to catch-up on missed vaccinations.

Texas Vaccines for Children Program Data

The [Texas Vaccines for Children](#) (TVFC) Program provides low-cost vaccines to eligible children from birth through 18 years of age through participation of over 3,000 healthcare providers statewide. Approximately **half (50%) of Texas children** are eligible for the TVFC program.

As of September 2021, 13 TVFC sites were in suspended status. The primary reason for suspension of the providers in September is non-compliance with program requirements.

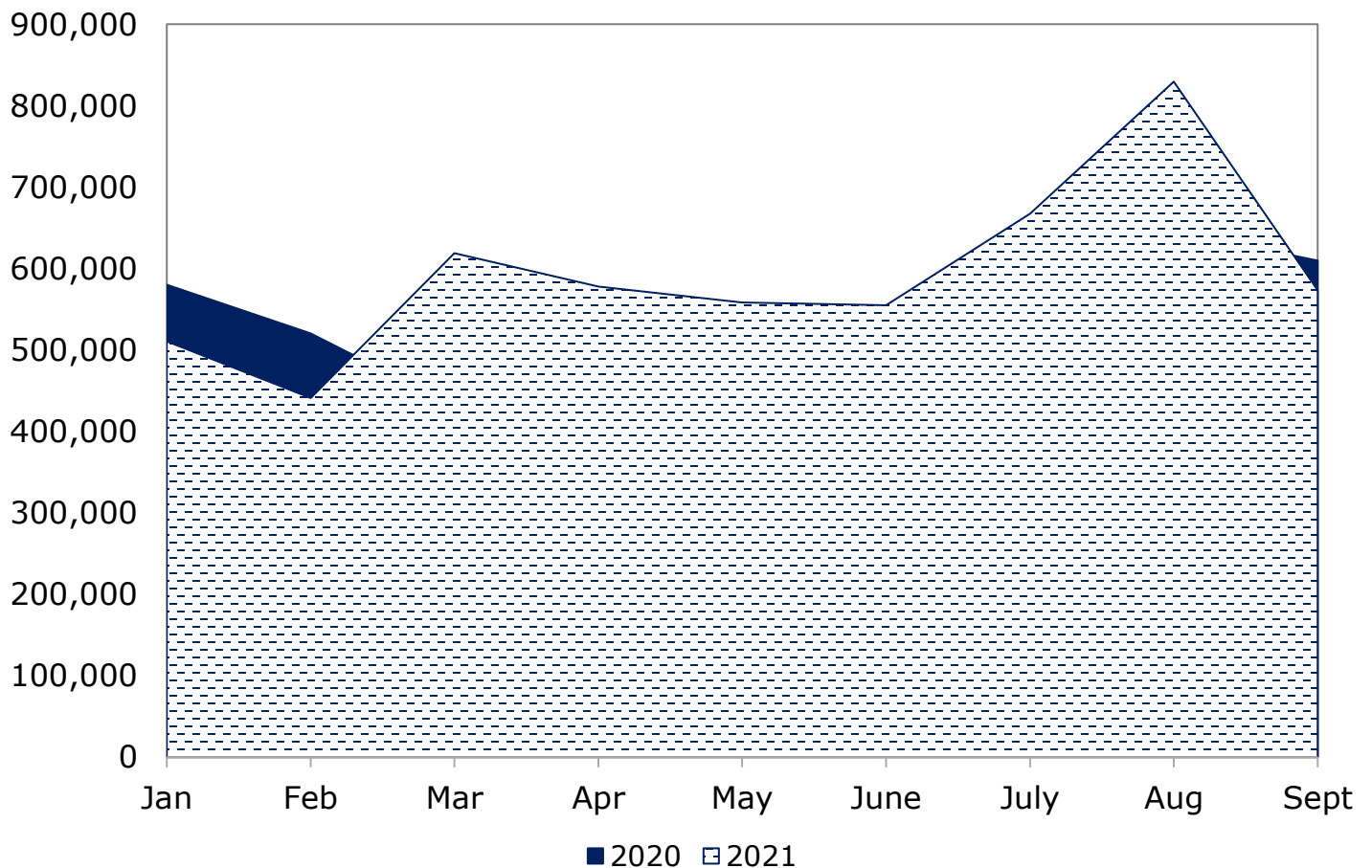
Statewide Results

Compared to the same month in 2020, the number of doses administered in Texas:

- Increased significantly in April 2021 (↑70.5 %)
- Slightly increased in July and August 2021 (↑32.7%, ↑28.5 % respectively)
- Slightly decreased in September (↓ -6.0%)

Administration rates began to rebound in March 2021, and April 2021 saw a significant increase compared to April 2020. TVFC providers have started to recover from disruptions and delays caused by the COVID-19 pandemic and are vaccinating at pre-pandemic rates, as shown in Figures 1 and 4.

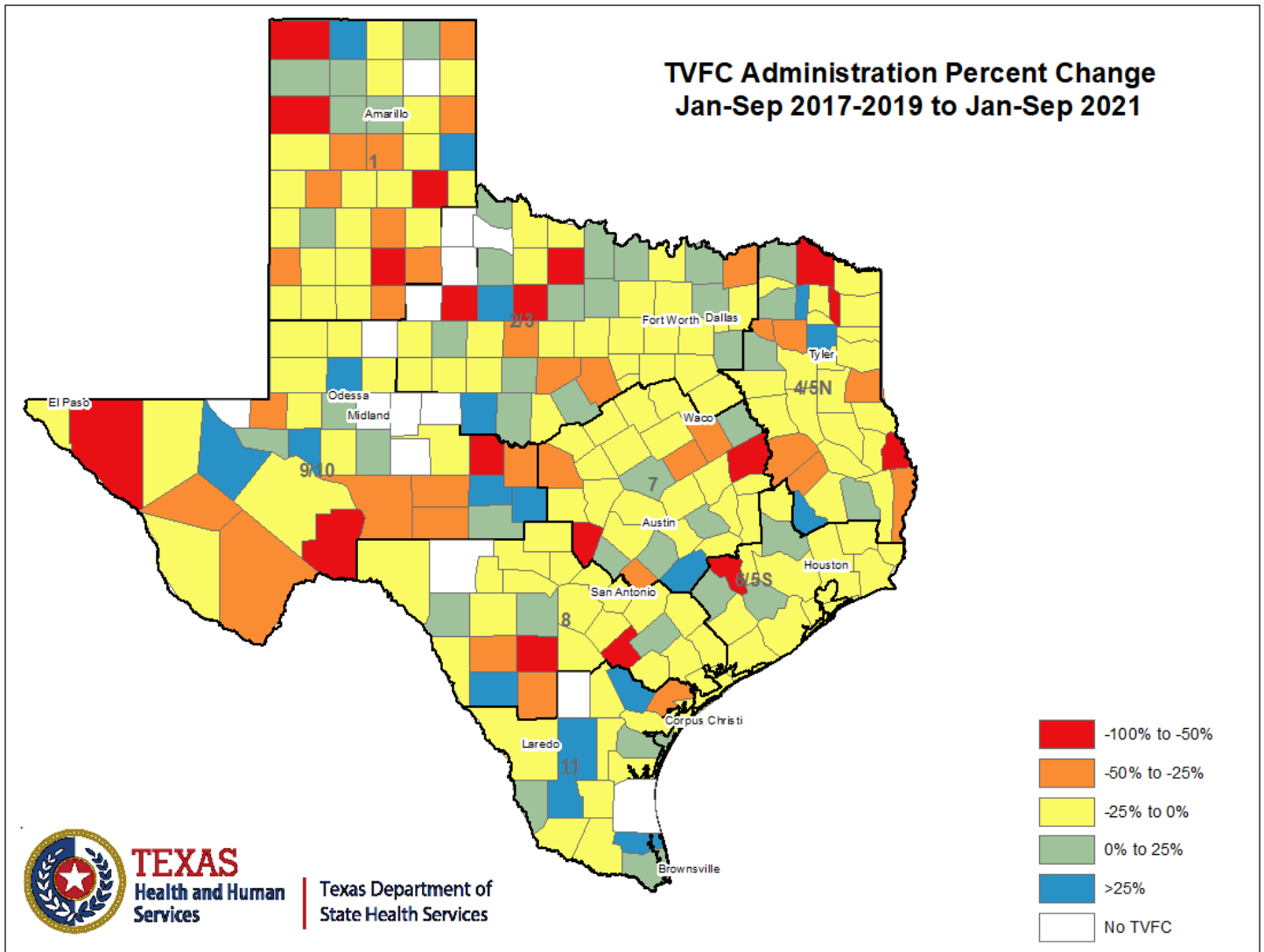
Figure 1. Number of TVFC Doses Administered^a by Month, 2020 and 2021.



^aIncludes all non-influenza vaccines that the Advisory Committee on Immunization Practices (ACIP) recommends for children

The map (Figure 2) below shows the Percent Change in TVFC Doses Administered in Texas from January-September 2017-2019 to January-September 2021.

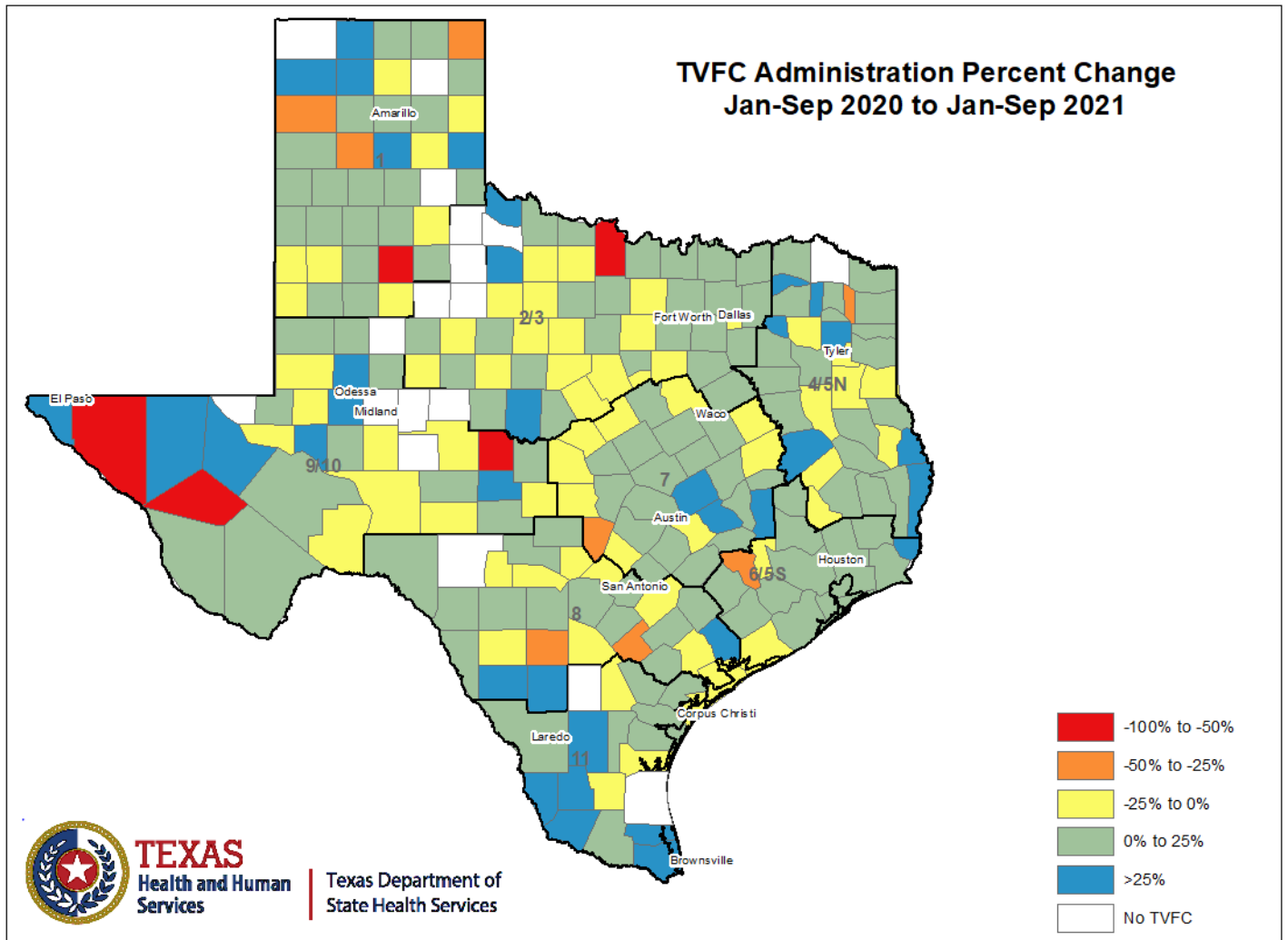
Figure 2. TVFC Administration Percent Change January- September 2017-2019^a to January-September 2021.



^a Represents the average of TVFC doses administered between January-September across years 2017-2019

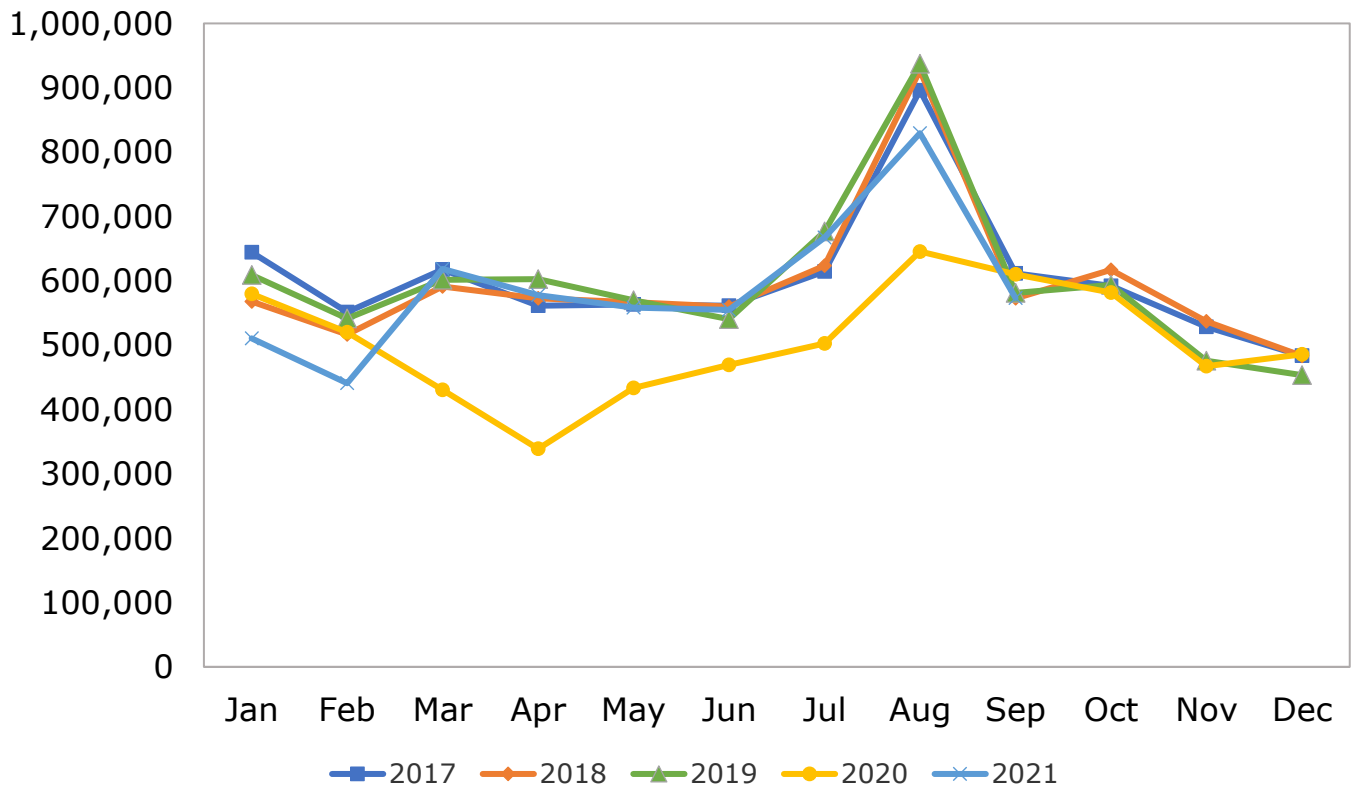
The map (Figure 3) below shows the Percent Change in TVFC Doses Administered in Texas from January- September 2020 to January- September 2021.

Figure 3. TVFC Administration Percent Change January- September 2020 to January- September 2021



The graph below (Figure 4) shows historical and current TVFC administration rates. 2020 had lower rates compared to previous years. 2021 is starting to match pre-pandemic levels, highlighting a significant rebound in vaccine administration.

Figure 4. Historical Number of TVFC Childhood non-flu Doses Administered^a by Month, 2017-2021.



^a Includes all vaccines that the Advisory Committee on Immunization Practices (ACIP) recommends for children except for Influenza (flu) vaccine.

Regional Results

Doses administered vary by public health region in Texas (Figure 5).

- Data below is shown by Public Health Region (PHR 1-11 shown on inset map)
- [San Antonio](#) and [Houston](#) have immunization programs which receive direct funding from the CDC (separate from the rest of the state). Therefore, doses administered in those jurisdictions are reported separate from their respective PHR. For example, the count of doses in PHR 8 does not include San Antonio Metropolitan Health District doses, as those doses are shown in a separate column.
- The change in doses administered varies per PHR. The percent change in monthly TVFC Doses Administered for Tdap-MCV4-HPV and measles vaccines by PHR from 2020 to 2021 is presented in the Appendices A and B (Figures 7-8).

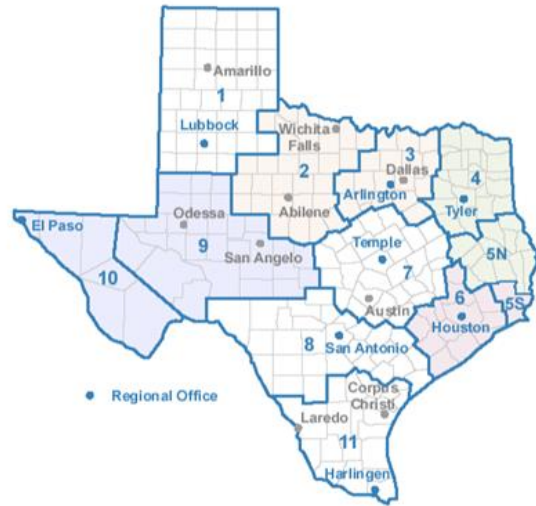
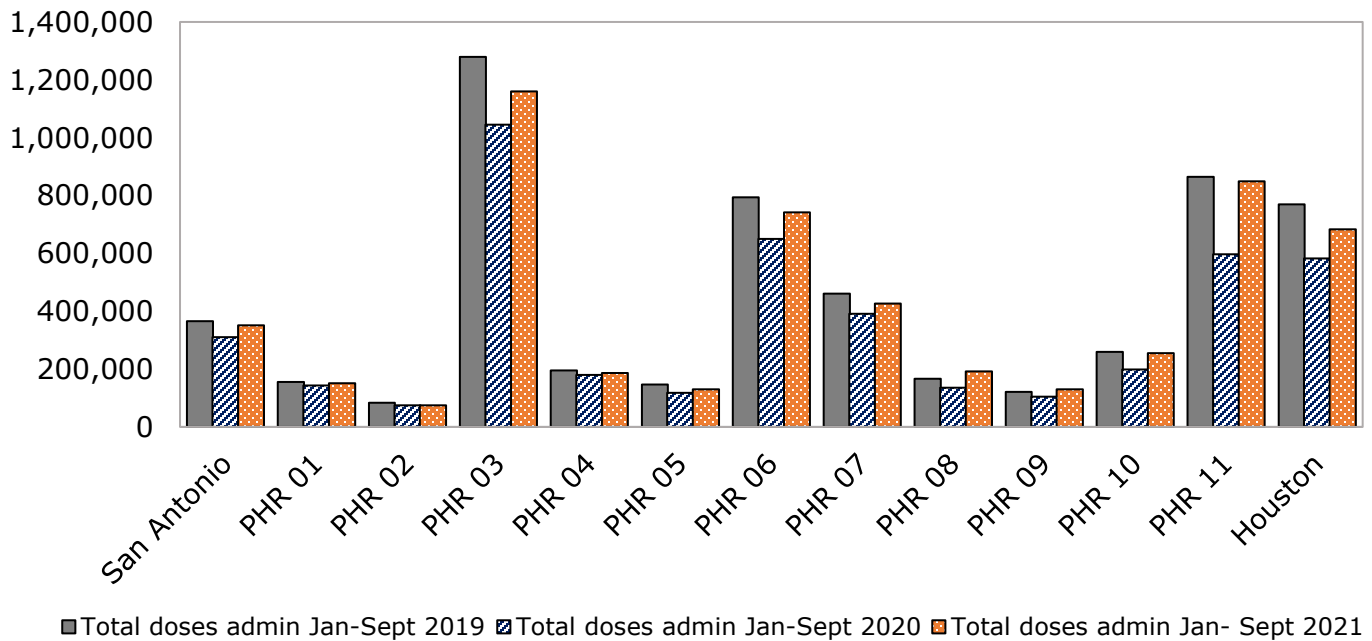


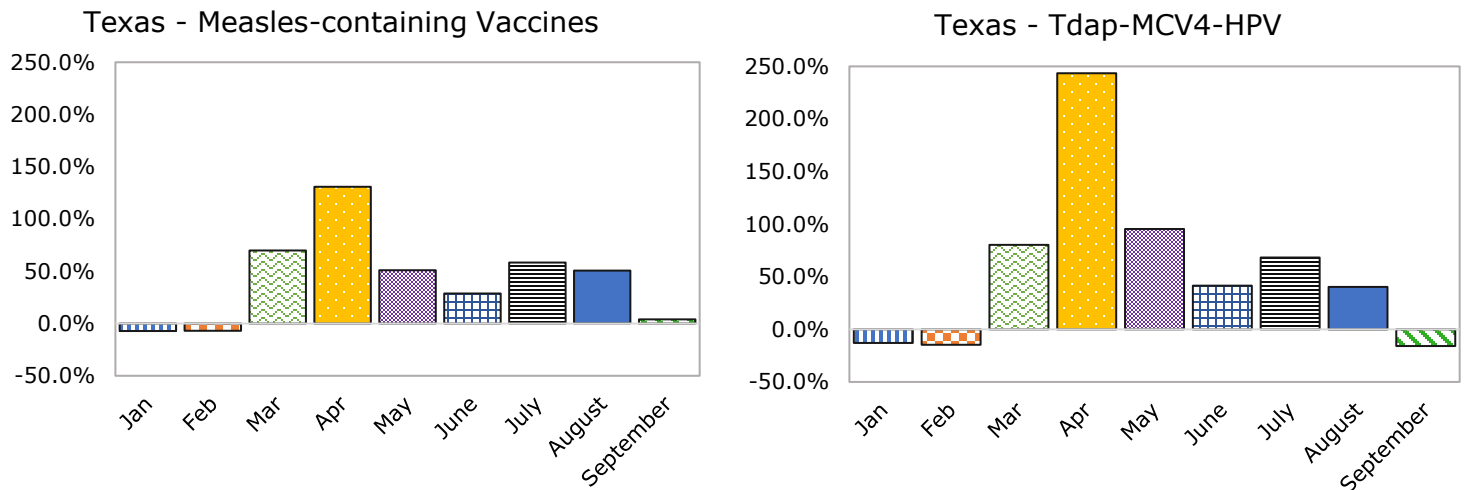
Figure 5. TVFC Doses Administered^a by Public Health Region (PHR), January-September 2019, 2020 and 2021.



^a Includes all vaccines that the Advisory Committee on Immunization Practices (ACIP) recommends for children except for Influenza (flu) vaccine.

Vaccines recommended for older children, such as Tdap, MCV4 and HPV, demonstrated lower coverage rates than vaccines predominantly administered to younger children (e.g. measles-containing vaccines) in early 2021. However, Tdap, MCV4, HPV and measles administration increased in March of 2021; with a significant increase in April 2021. While the change in doses administered varies per region, Texas continues to show higher doses administered since March 2021 (Figure 6 and Appendix Figures 7-8).

Figure 6. Percent Change^a in Monthly TVFC Doses Administered for Measles-containing Vaccines (MMR, MMRV) and Tdap-MCV4-HPV Vaccines in Texas from 2020 to 2021



^aCalculated as doses administered to children in the corresponding month (2021-2020)/2020

Discussion

Estimates from the most recent National Immunization Survey (NIS-Child, 2018) indicated vaccination rates among two-year-old children did not meet national goals for multiple vaccines before the pandemic (Table 1). Further declines could result in increased risk of outbreaks of vaccine-preventable diseases. Similarly, vaccination rates among teens have improved in recent years, but coverage for several vaccines remains suboptimal based on the 2018 NIS-Teen Survey (Table 2).

Table 1. Healthy People 2020 and Healthy People 2030 Goals^a Compared with NIS-Child 2018 Vaccination Coverage Estimates for Children Born 2015-2016^b.

Vaccine	HP2020 Coverage Goal	HP2030 Coverage Goal	Texas Coverage (Estimate and 95% CI)	Texas Outcome ^c
4+DTaP	90%	90%	79.1 (76.8-81.3)	Does not meet
3+Polio	90%	-- ^d	91.2 (89.5-92.7)	Meets
1+MMR	90%	90.8%	90.3 (88.6-91.9)	Meets
Hib-FS	90%	-- ^d	78.8 (76.5-81.1)	Does not meet
3+HepB	90%	-- ^d	89.2 (87.4-90.9)	Does not meet
1+Var	90%	-- ^d	90.0 (88.2-91.6)	Meets
4+PCV	90%	-- ^d	81.5 (79.3-83.7)	Does not meet
HepB birth dose	85%	-- ^d	79.4 (77.1-81.6)	Does not meet
2+HepA	85%	80%	84.0 (80.0-87.6)	Meets
Rota	80%	-- ^d	74.1 (71.6-76.4)	Does not meet
4:3:1:3:3:1:4	80%	-- ^d	67.3 (64.6-69.9)	Does not meet

^a HP2020 and HP2030 goals are for children to receive all vaccinations listed by 19-35 months of age, except for the HepB Birth Dose which should be completed within the first three days of life. NIS-Child coverage estimates are calculated at 24 months of age except for the HepB Birth Dose within the first three days of life, Rota by 8 months of age, and 2+HepA by 35 months of age. HP2030 goals do not include coverage goals for 3+Polio, Hib-FS, 3+Hep B, 1+Var, 4+PCV, HepB birth dose, Rota and 4:3:1:3:3:1:4 vaccines.

^b Coverage estimates for children born in 2016 are preliminary and come from survey years 2017 and 2018.

^c A point estimates greater than the goal is designated as “Meets” while a point estimate below the goal is designated as “Does not meet.” A designation of “Exceeds” would be designated if the lower end of the 95% confidence interval (CI) exceeded the goal.

^dHP2030 goals do not include coverage goals for 3+Polio, Hib-FS, 3+Hep B, 1+Var, 4+PCV, HepB birth dose, Rota and 4:3:1:3:3:1:4 vaccines.

Table 2. Healthy People 2020 and Healthy People 2030 Goals^c Compared with NIS-Teen 2018 for Children 13 to 15 Years Old.

Vaccine	HP2020 Coverage Goal	HP2030 Coverage Goal	Texas Coverage	Texas Outcome
1 dose Tdap	80%	-- ^c	83.4%	Meets
≥1 dose MenACWY	80%	-- ^c	86.7%	Meets
HPV, Adolescents	--	80%	--	--
HPV UTD, females ^a	80%	-- ^c	47.8%	Does not meet
HPV UTD, males ^a	80%	-- ^c	39.4%	Does not meet
≥2 doses VAR ^b	90%	-- ^c	82.0%	Does not meet

^a Includes those with ≥ 3 doses, and those with 2 doses when the first HPV vaccine dose was initiated at age <15 years and at least five months minus four days elapsed between the first and second dose as specified by Clinical Decision Support for Immunization (CDSi). This update to the HPV recommendation occurred in December of 2016.

^b Excludes children who have a history of varicella disease.

^c HP2030 does not include coverage goals for 1 dose Tdap, ≥1dose MenACWY, HPV UTD females and males and ≥2 doses VAR vaccines

The DSHS Immunization Section will continue to monitor the impact of the COVID-19 pandemic on routine immunization rates in Texas. DSHS will provide resources to assist healthcare providers in their efforts to vaccinate the public and will work to maintain strong protection against vaccine-preventable diseases.

Healthcare providers should continue modifying procedures to ensure vaccination services are provided while minimizing potential spread of COVID-19. This includes modifying office practices to minimize contact between patients and their families. Children who have fallen behind should be vaccinated as soon as possible using published catch-up vaccination [schedules](#)⁴. Reminder-recall systems may be useful to bring patients back into the clinic.

Parents are encouraged to call their pediatrician to schedule routine vaccination while following all available COVID-19 precautions.

Vaccination is an *essential medical service*

Recommendations for providers:

- Assess the vaccination status of all patients across the life span at every health care visit.
- Administer routinely recommended vaccines to children, adolescents, and adults (including pregnant women).
- Delay vaccination for persons with suspected or confirmed COVID-19.
- Follow [guidance](#) to prevent the spread of COVID-19 in health care settings.
- Encourage vaccination at the patient's medical home.
- Implement effective strategies for [catch-up vaccination](#).
- Communicate with patients/families about how they can be safely vaccinated during the pandemic.³

References

- ¹Santoli JM, Lindley MC, DeSilva MB, et al. Effects of the COVID-19 Pandemic on Routine Pediatric Vaccine Ordering and Administration — United States, 2020. *MMWR Morb Mortal Wkly Rep* 2020;69:591–593. DOI: <http://dx.doi.org/10.15585/mmwr.mm6919e2>
- ²Patel B, Murthy , Zell E, et al. Impact of the COVID-19 Pandemic on Administration of Selected Routine Childhood and Adolescent Vaccinations — 10 U.S. Jurisdictions, March–September 2020. *MMWR Morb Mortal Wkly Rep* 2021;70:840–845. DOI: <http://dx.doi.org/10.15585/mmwr.mm7023a2>
- ³Interim Guidance for Routine and Influenza Immunization Services During the COVID-19 Pandemic. <https://www.cdc.gov/vaccines/pandemic-guidance/index.html>
- ⁴Catch-up immunization schedule for persons aged 4 months–18 years who start late or who are more than 1 month behind, United States, 2021. <https://www.cdc.gov/vaccines/schedules/hcp/imz/catchup.html>
- ⁵COVID-19 and Routine Childhood Vaccinations—Identifying Gaps and Informing Solutions., United States, 2021. <https://jamanetwork.com/journals/jamapediatrics/article-abstract/2784889>

Our Goals

The goals of the DSHS Immunization Section are to eliminate the spread of vaccine preventable diseases by increasing vaccine coverage for Texans, raising awareness of the diseases that vaccines prevent, and educating the public about vaccine safety. We do this through administration of the Texas Immunization Registry (ImmTrac2) which provides access to immunization records, establishment of school immunization rules, and administration of the Texas Vaccines for Children and Adult Safety Net programs, which provide low-cost vaccines to eligible children and adults.



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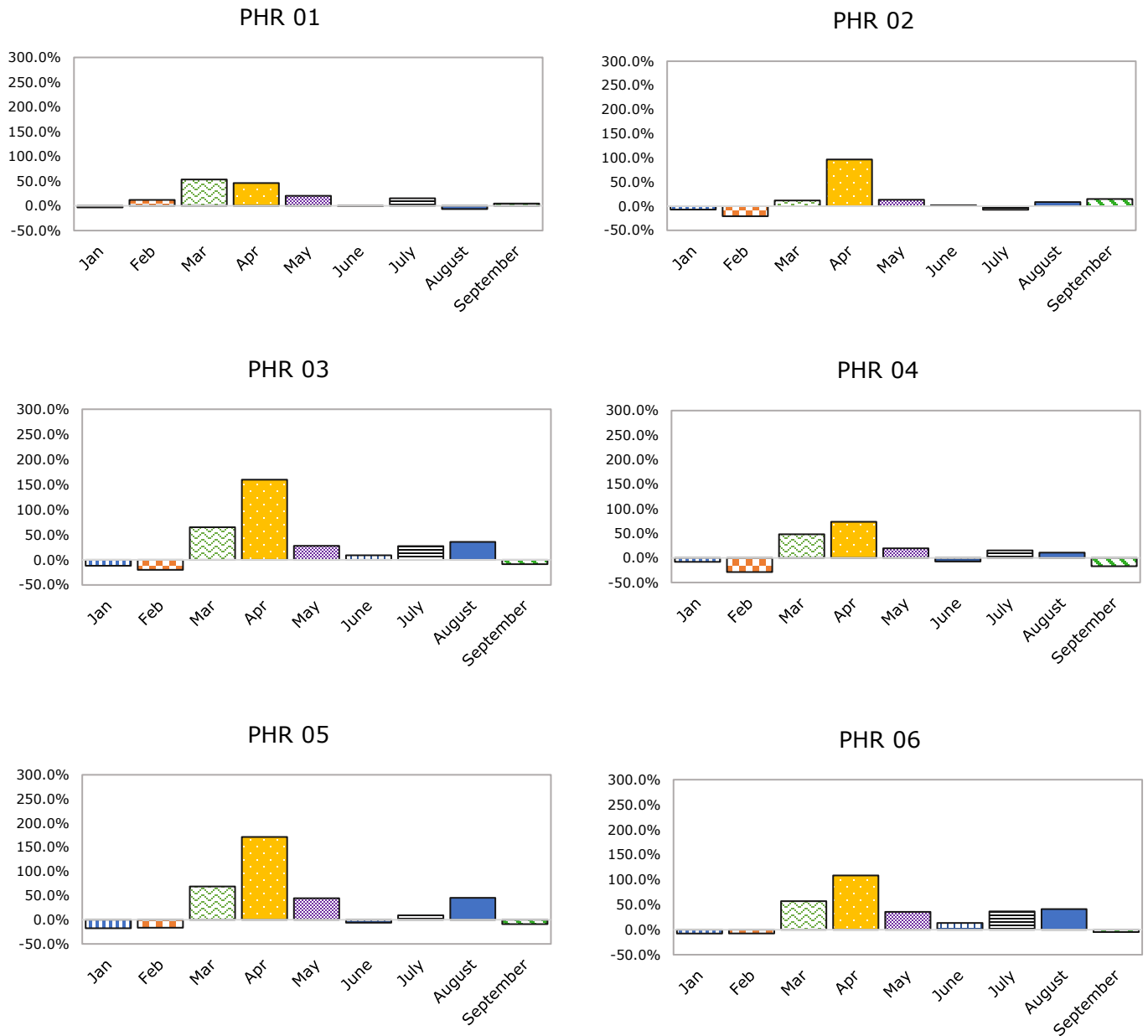
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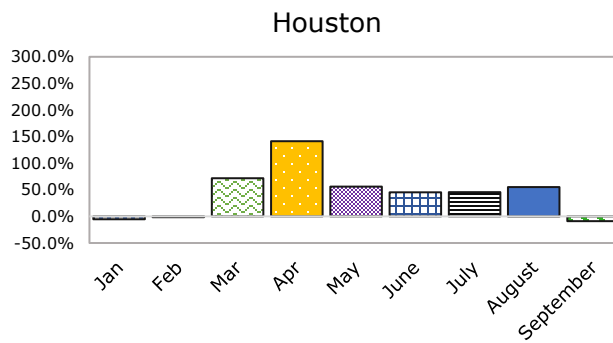
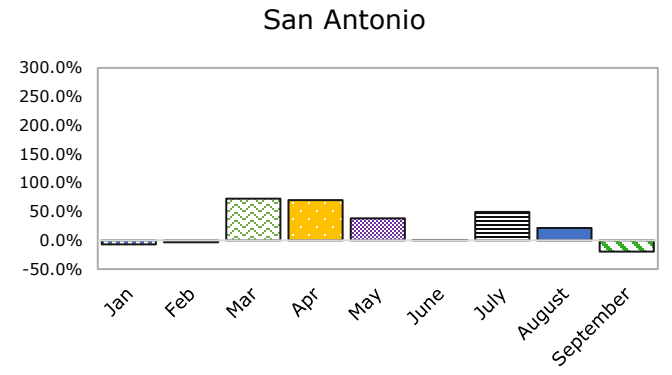
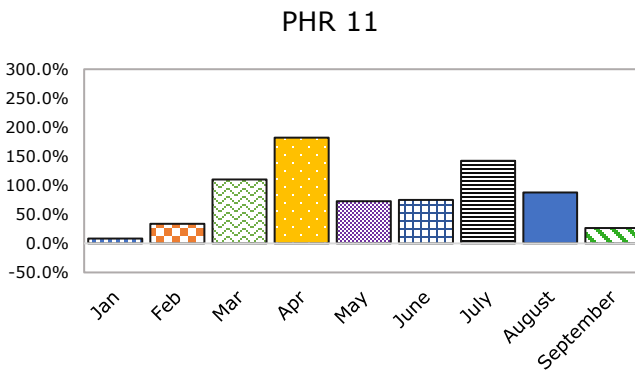
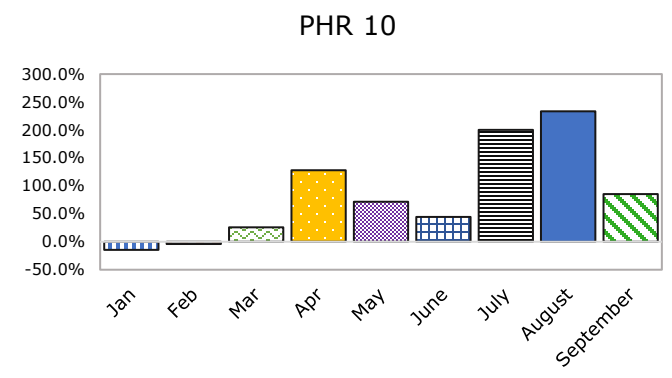
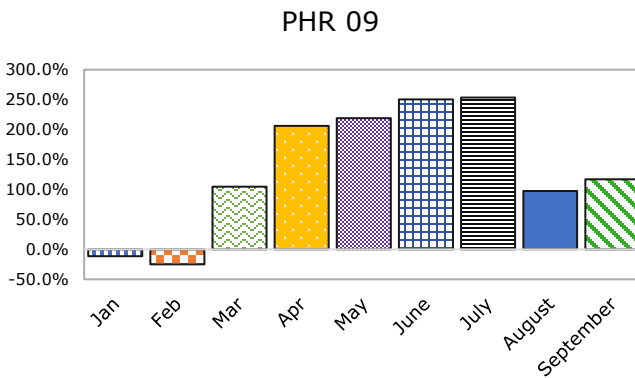
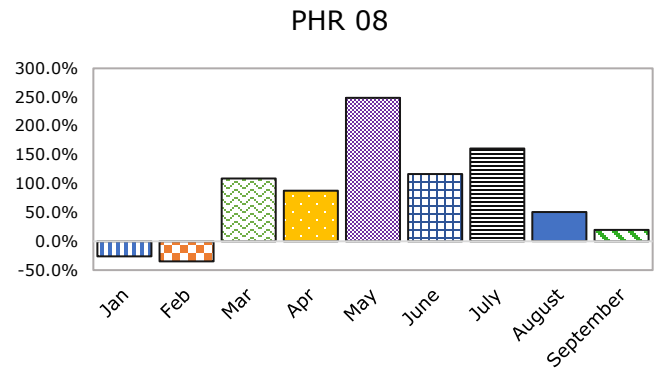
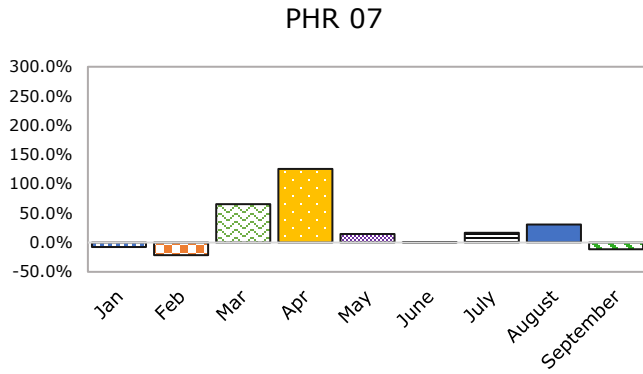
imm.epi@dshs.texas.gov

dshs.texas.gov/immunize

Appendix A

Figure 7. Percent Change^a in Monthly TVFC Doses Administered for Measles-containing Vaccines (MMR, MMRV) Vaccines by Public Health Region (PHR) from 2020 to 2021

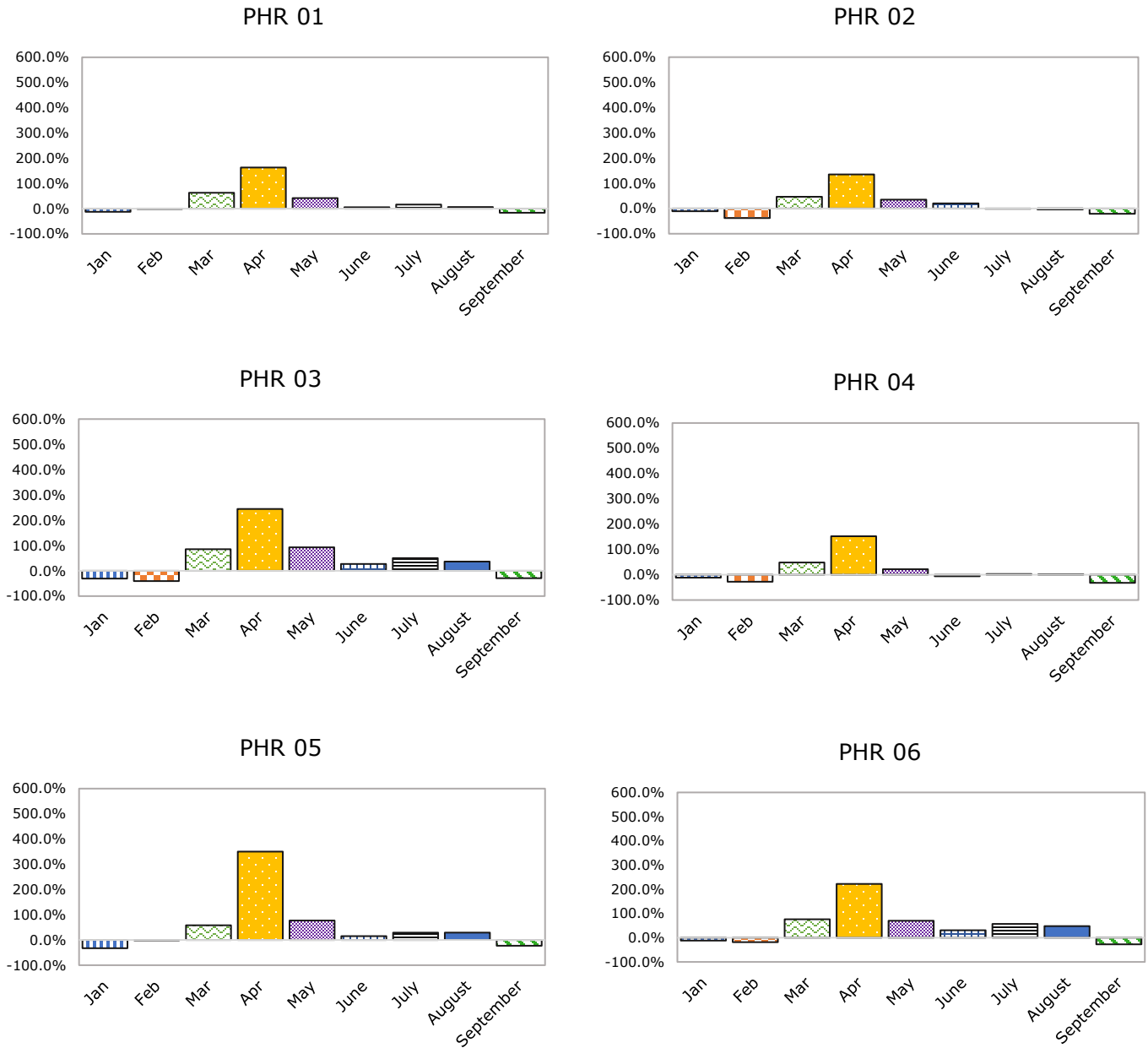




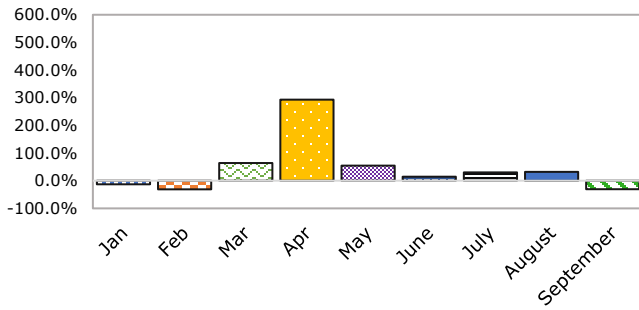
^aCalculated as doses administered to children in the corresponding month (2021-2020)/2020

Appendix B

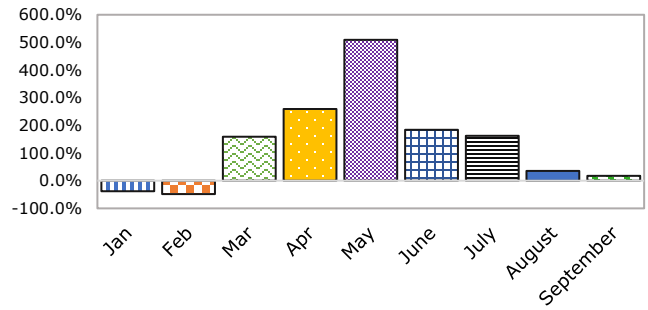
Figure 8. Percent Change^a in monthly TVFC Doses Administered for Tdap-MCV4-HPV Vaccines by Public Health Region (PHR) from 2020 to 2021.



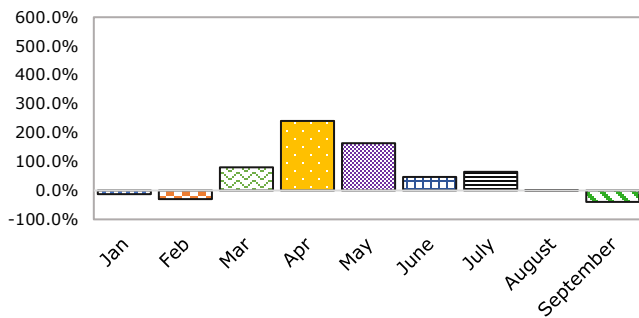
PHR 07



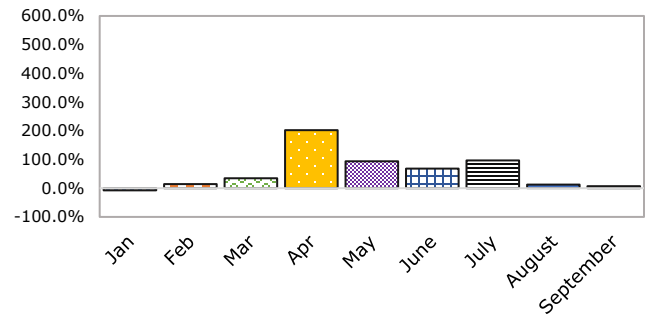
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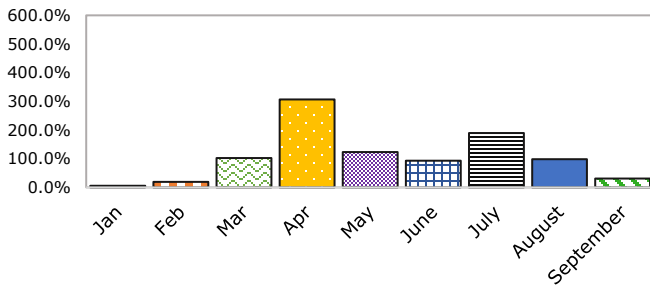
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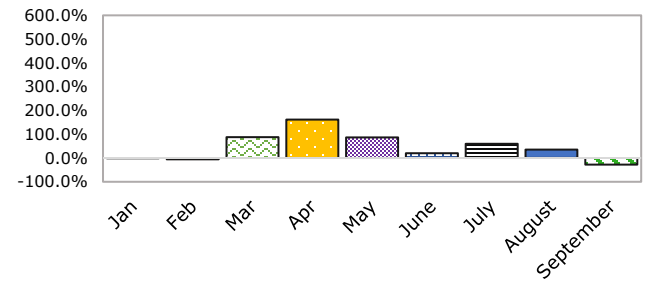
PHR 10



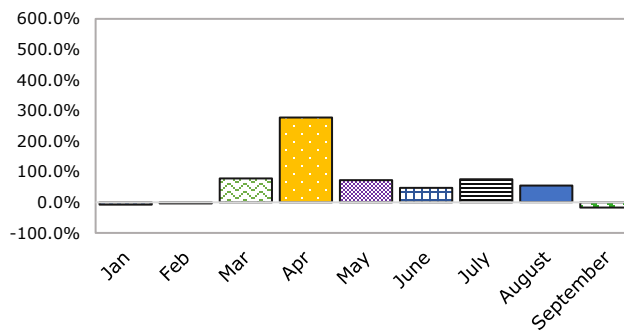
PHR 11



San Antonio



Houston



^aCalculated as doses administered to children in the corresponding month (2021-2020)/2020

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