

Michigan Department of Health and Human Services (MDHHS)
Division of Immunization
COVID-19 Impact Report
September 14, 2020

This report is created monthly by the MDHHS Division of Immunization to monitor the impact of the COVID-19 pandemic on immunization administration and reporting patterns to the Michigan Care Improvement Registry (MCIR) and the resulting effect on immunization coverage estimates.

Key Points:

- The last week included on this report is 2020 MMWR week 36, which included the Labor Day holiday and likely impacted dose administration patterns.
- In May 2020 MCIR data indicated **notable declines in vaccination coverage for children 2 years of age and younger at milestone ages following the Michigan stay-at-home order** implemented March 23, 2020. As of September 5, 2020, vaccination coverage has increased in the one-month age cohorts for children 5, 7, 16, 19 and 24 months of age.
 - Differences in coverage by Medicaid status continue. Children 7 months of age have the largest disparity with coverage 24.5% lower for Medicaid-enrolled children than in non-Medicaid children, according to the current September assessment.
- From March to June 2020, statewide coverage for children 19 through 35 months of age for 4 DTaP, 3 Polio, 1 MMR, 3 Hib, 3 HepB, 1 Varicella, 4 PCV, 2 HepA (43133142) decreased from 57.9% to 53.6%. However, from June to August 2020 **there has been a gradual rebound with coverage at 55.0% in August**, according to MCIR profile report data. Additionally, for the same series without 2 HepA (4313314), **coverage also increased from 70.1% in July to 70.3% in August**. Series coverage is 2.9% and 3.6% lower than in August 2019.
- Coverage for adolescents 13 through 17 years of age for 1 Tdap, 3 Polio, 2 MMR, 3 HepB, 2 Varicella, 1 MenACWY, 2 or 3 HPV (1323213) **increased from 42.0% in July to 42.6% in August**. Coverage for the same series without 2 or 3 HPV **remained at 75.4% from July to August**.
- While the disparity in child coverage for the 4313314 series by Medicaid status remains, **coverage rose from 72.8% in July to 72.9% in August for non-Medicaid children and from 66.9% in July to 67.2% in Medicaid enrolled children**.
- The following data represent a comparison of vaccine doses administered in 2020 to the average of doses administered during the same time periods in 2018 and 2019.
 - Thus far the largest decreases across the lifespan were observed in **April 2020, at 63.3%**.
 - Dose administration typically increases in August aligning with back-to-school vaccination campaigns; in 2020 there was a **21.6% decrease in dose administration** compared to 2018 and 2019.
 - Overall **August 2020 comparison to the August 2018-19 average** by age group:
 - 17.1% **decrease** in children (0-8 years)
 - 9.3% **decrease** in children 0-24 months
 - 36.4% **decrease** in adolescents (9-18 years)
 - 15.0% **decrease** in adults (19-105 years)
- 2020 public dose orders decreased, in part due to a system outage, during MMWR week 36 (week ending September 5, 2020) a 78.4% decrease compared to the average of the same

weeks in 2018 and 2019. Overall dose orders were 13.1% below the average in August 2020 compared to 15.5% below in July 2020.

- Trends in dose administration by vaccine type and age group:
 - Dose administration continues to be lower for most vaccine types in children, adolescents, and adults in 2020 compared to the 2018-19 average.
- Dose administration patterns vary by MCIR facility type.
 - **Pediatric and family practices** continue to report the largest increases in doses administered in the child and adolescent populations since mid-April.
- **Most counties reported a decrease in doses administered across the lifespan in 2020 compared to the 2018-19 average.** The lowest quartile of counties have reported 25.9% to 48.3% less doses in 2020.
- The Division of Immunization created a new website to support immunization providers in the context of COVID-19: www.Michigan.gov/VaccinesDuringCOVID

Report Sections:

1. Child Coverage by Milestone Vaccination Ages

- Vaccination status for one-month cohorts of children at ages 1, 3, 5, 7, 16, 19 and 24 months are assessed; ages corresponding to the end of an Advisory Committee on Immunization Practices (ACIP) recommendation period for one or more vaccines. Current data are summarized and compared to average coverage levels in 2019. Data are also summarized by MCIR region and Medicaid status.
- Spreadsheets of county level data are available, please contact MCIR epidemiologist Cristi Bramer at bramer@michigan.gov.

2. Coverage Data by County, Region, and Statewide

- Series-level coverage estimates for children and adolescents compiled using MCIR profile reports.
- Coverage estimates for Medicaid-enrolled children also compiled using MCIR profile reports.
- Spreadsheets of county level data are available, please contact MCIR epidemiologist Jeremy Kuo at kuoj1@michigan.gov.
- Historical county level spreadsheets are also available on MCIR.org (<https://www.mcir.org/providers/local-health-departments-lhd/county-data/>).

3. Public Dose Orders

- The Vaccine for Children (VFC) program is a federally funded program that provides vaccines at no cost to eligible children who might not otherwise be vaccinated because of inability to pay. Michigan providers have participated in VFC since 1995.
- The Michigan Adult Vaccine Program (MI-AVP) provides public funds for select vaccines for adults, aged 19 years and older, who are uninsured or under-insured (adult has insurance, but it does not cover any part of the vaccination), who have a need for specific vaccines, and who have specific risk factors.
 - The MI-AVP program is available to local health departments, federally qualified health centers, migrant health centers and tribal health centers.
- Public orders include VFC and MI-AVP doses.

4. Doses by Eligibility

- VFC, MI-AVP, Medicaid and Private doses are classified based on eligibility codes reported to the MCIR. Only public doses are required to be submitted to the MCIR with an eligibility code.
 - Dose eligibility may be incorrectly or not entered.
 - Doses reported without or with an unknown eligibility code are not included in these figures.
 - Spreadsheets of county level administration data are available, please contact MCIR epidemiologist Cristi Bramer at bramerc@michigan.gov.
- 5. Doses by Vaccine Type by Age Group**
- The ACIP recommends immunization across the lifespan. This section of the report is separated by child (0 through 8 years of age), adolescent (9 through 18 years) and adults (19 years and older). This report includes the most common non-influenza vaccine (excludes non-vaccine products such as tuberculin skin tests and immunoglobulins) types by age at administration reported to the MCIR.
 - Of note, the State of Michigan has been experiencing a hepatitis A outbreak since August 2016 and experienced a measles outbreak in early 2019. As a result, there have been peaks of administration of vaccines containing hepatitis A and measles antigens across the lifespan. Additionally, a new herpes zoster vaccine was recommended in late 2017 and adult uptake has been considerable in 2018 and 2019 across Michigan.
 - Spreadsheets of county level administration data are available, please contact MCIR epidemiologist Cristi Bramer at bramerc@michigan.gov.
- 6. Doses by MCIR Facility Type by Age Group**
- Each facility registered in the MCIR is assigned one of 54 facility types (i.e. family practice, local health department, pharmacy, etc.).
 - Non-influenza doses administered by select facility types for each age group.
 - Spreadsheets of county level administration data are available, please contact MCIR epidemiologist Cristi Bramer at bramerc@michigan.gov.
- 7. Percent Change in Non-Influenza Doses by County**
- County level map depicting the percent change in non-influenza doses administered and reported to the MCIR across the lifespan in January through July 2020 to the average for the same time period in 2018 and 2019 (based on facility county).

Additional Information on Data in the Report:

- Michigan’s immunization providers are required to report, within 72 hours, all vaccinations administered to persons born after December 31, 1993 and less than 20 years of age in MCIR, unless the parent, guardian, or person *in loco parentis* of the child who received the immunizing agent objects by written notice (as of March 2020, less than 0.1% of children less than 19 years of age had been opted-out). Vaccination record submission to the MCIR for adults 20 years and older is strongly encouraged but is not required.
- The MDHHS Division for Vital Records and Health Statistics recently started the transition to a new system to report electronic birth certificates. This transition may be causing a delay in hepatitis B birth dose reporting.
- Dose administration figure intervals were updated from monthly to weekly ([MMWR week](#)) to better visualize administration patterns during the pandemic.

- The [Morbidity and Mortality Weekly Report \(MMWR\)](#) week is the week of the epidemiologic year for the National Notifiable Diseases Surveillance System (NNDSS). MMWR week does not fall on the same dates every year. MMWR weeks run from Sunday through Saturday.
- Please note that non-standard events (i.e. not holidays or back to school physicals) can impact dose administrations. For example, the record cold weather experienced in late January 2019 occurred in 2019 MMWR week 5. The last week included on this report is 2020 MMWR week 27, which included the Fourth of July holiday, which likely impacted dose administration and ordering patterns.

MCIR Regions

Region 1
City of Detroit, Livingston, Macomb, Monroe, Oakland, St. Clair, Washtenaw and Wayne
Region 2
Allegan, Berrien, Branch, Calhoun, Cass, Hillsdale, Ionia, Jackson, Kalamazoo, Kent, Lenawee, Muskegon, Ottawa, St. Joseph, and Van Buren
Region 3
Barry, Clinton, Eaton, Gratiot, Ingham, and Montcalm
Region 4
Bay, Genesee, Huron, Lapeer, Midland, Saginaw, Sanilac, Shiawassee, and Tuscola
Region 5
Alcona, Alpena, Antrim, Arenac, Benzie, Charlevoix, Cheboygan, Clare, Crawford, Emmet, Gladwin, Grand Traverse, Iosco, Isabella, Kalkaska, Lake, Leelanau, Manistee, Mason, Mecosta, Missaukee, Montmorency, Newaygo, Oceana, Ogemaw, Oscoda, Osceola, Otsego, Presque Isle, Roscommon, and Wexford
Region 6
Alger, Baraga, Chippewa, Delta, Dickinson, Gogebic, Houghton, Iron, Keweenaw, Luce, Mackinac, Marquette, Menominee, Ontonagon, and Schoolcraft

1. Child Coverage by Milestone Vaccination Ages

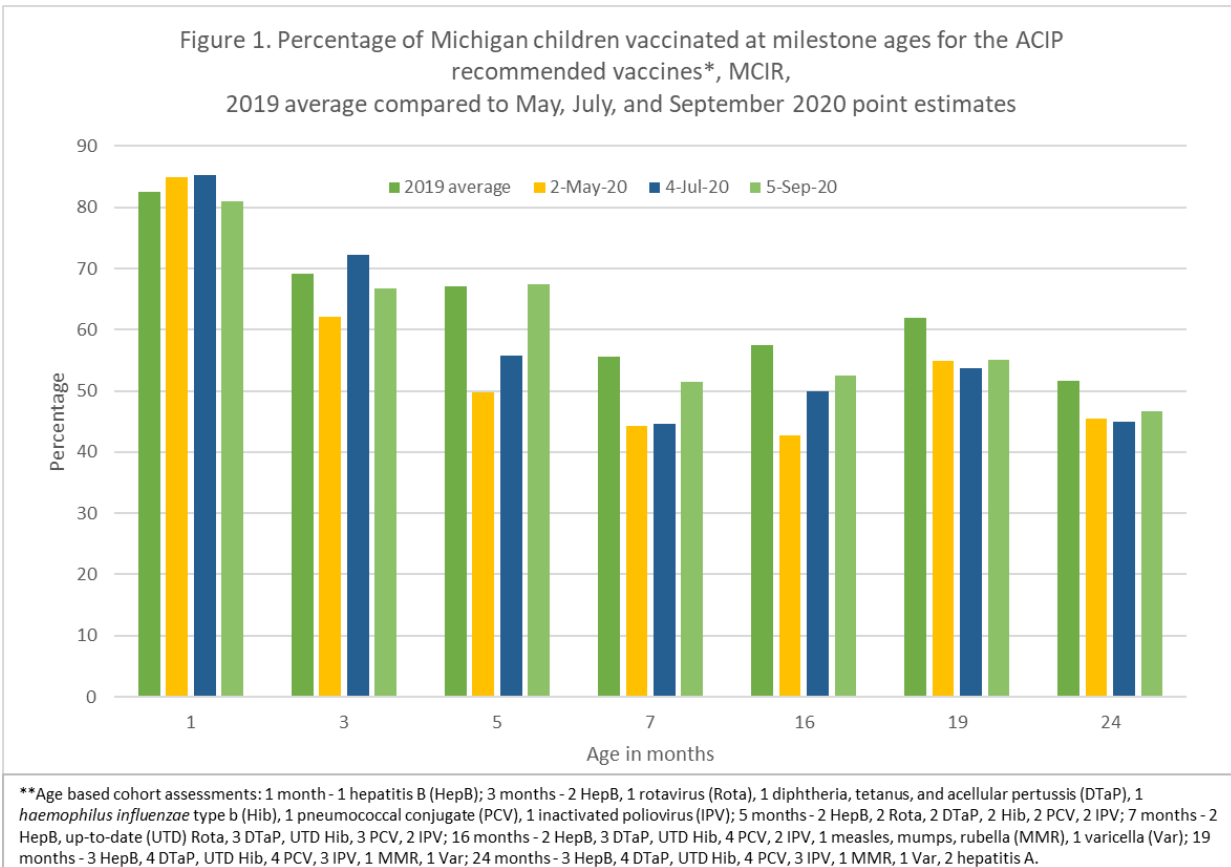


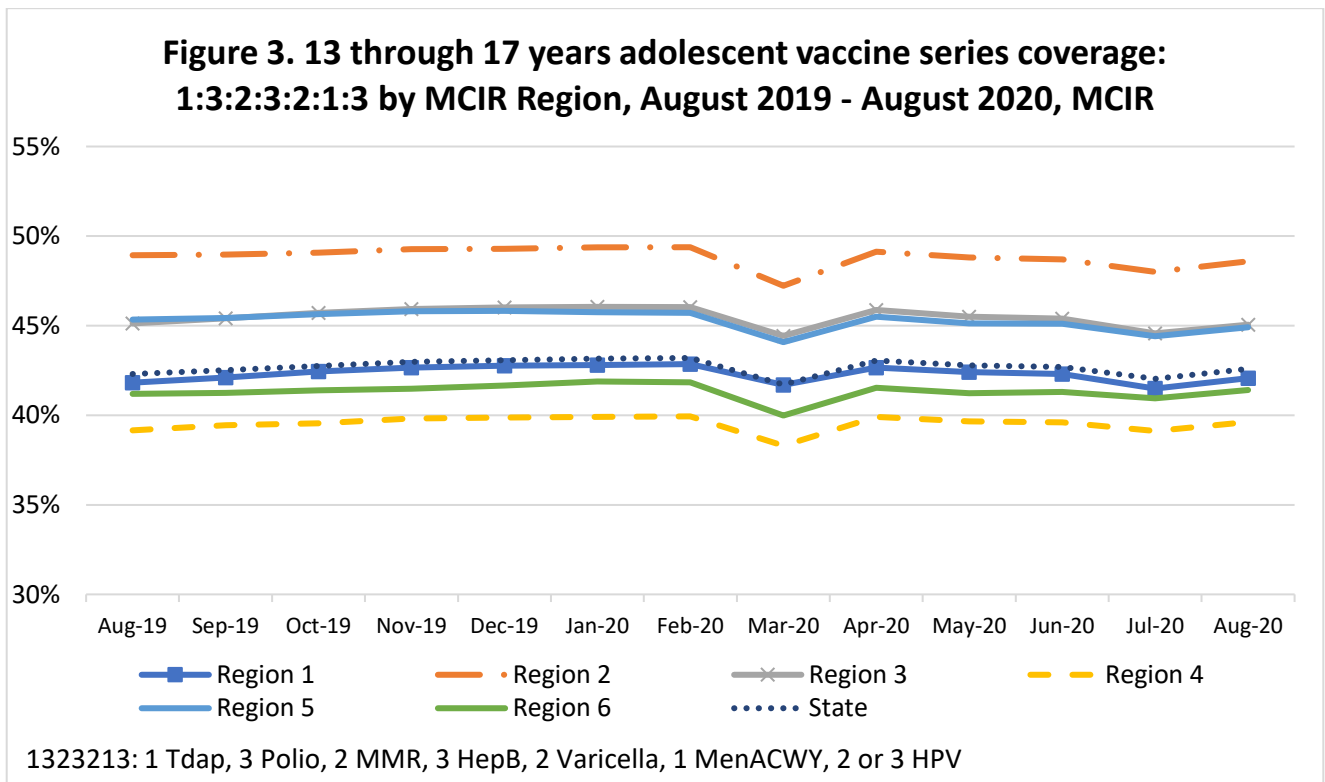
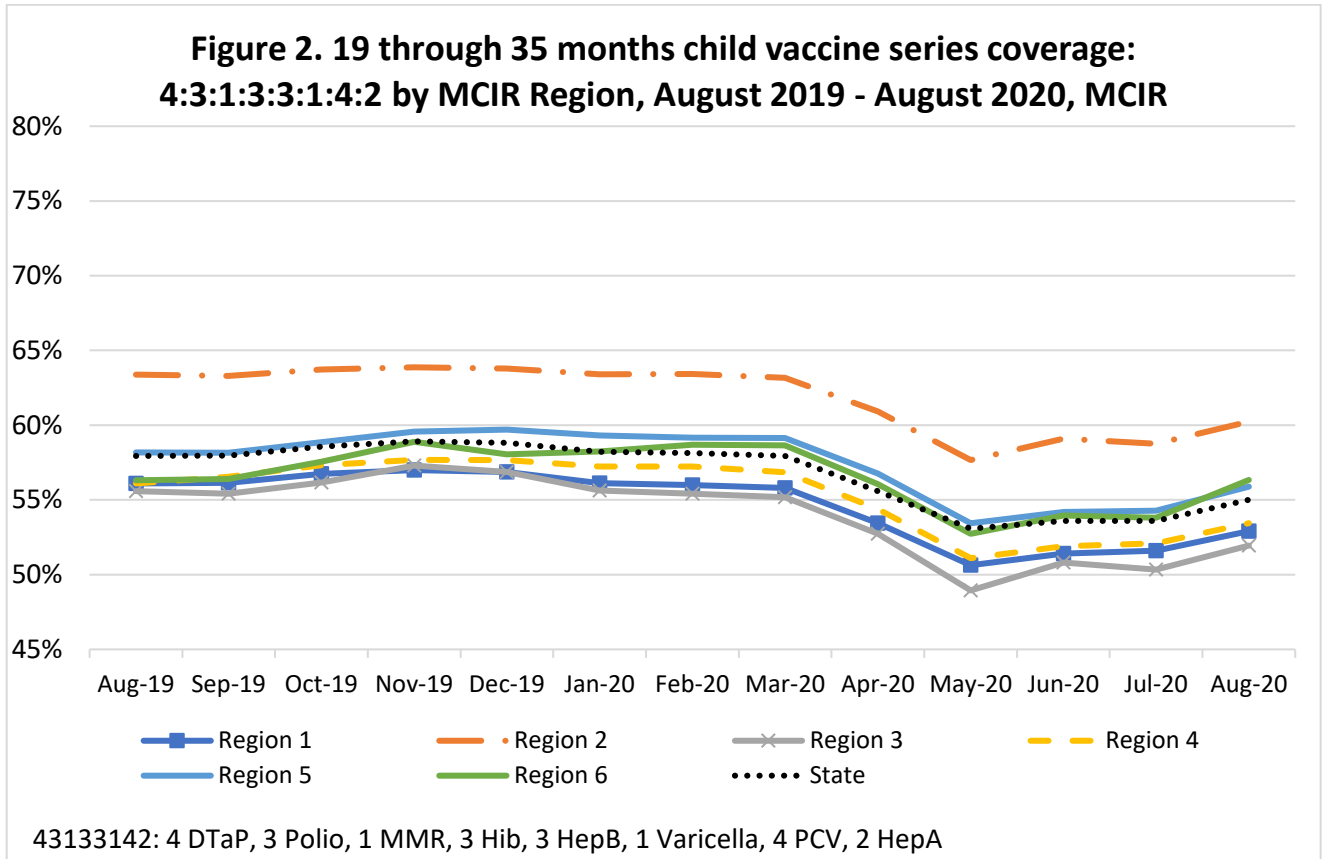
Table 1. Percentage of children vaccinated for the ACIP recommended vaccines at milestone ages* by MCIR region, September 5, 2020

	1mo	3mo	5mo	7mo	16mo	19mo	24mo
Region 1	81	62.2	64.9	48.6	48.5	51.1	45.2
Region 2	82.5	72.1	73.6	59.9	61.1	62	54.1
Region 3	86	73.7	70.2	52.8	54.7	58.9	41.1
Region 4	77.8	70	64.5	44.7	49.8	52.8	42.6
Region 5	77.2	72.5	68.3	50.4	52.4	59.6	44.7
Region 6	84.3	69.4	65	51.4	57	59.2	49.2

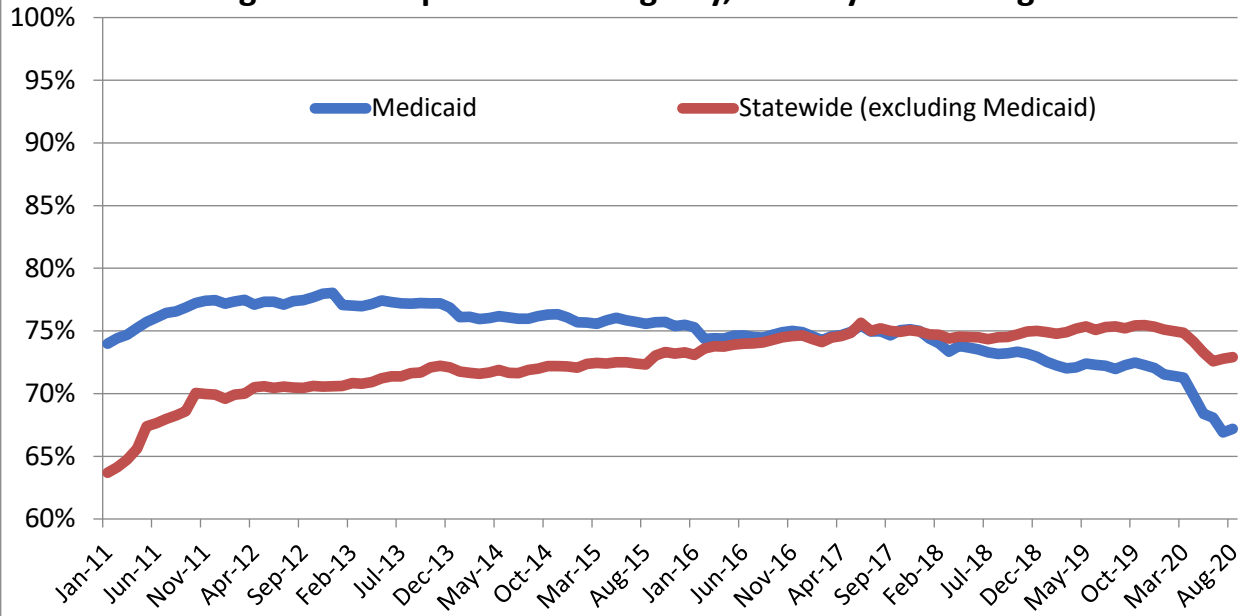
Table 2. Percentage of children vaccinated for the ACIP recommended vaccines at milestone ages by Medicaid status, September 5, 2020

	1mo	3mo	5mo	7mo	16mo	19mo	24mo
Medicaid	81.7	67.9	59.6	40.4	45.7	48.6	40.4
Non-Medicaid	80.8	65.7	76.2	64.9	59.2	60.4	51.9
Difference	-0.9	-2.2	16.6	24.5	13.5	11.8	11.5

2. Coverage Data by Region and Statewide

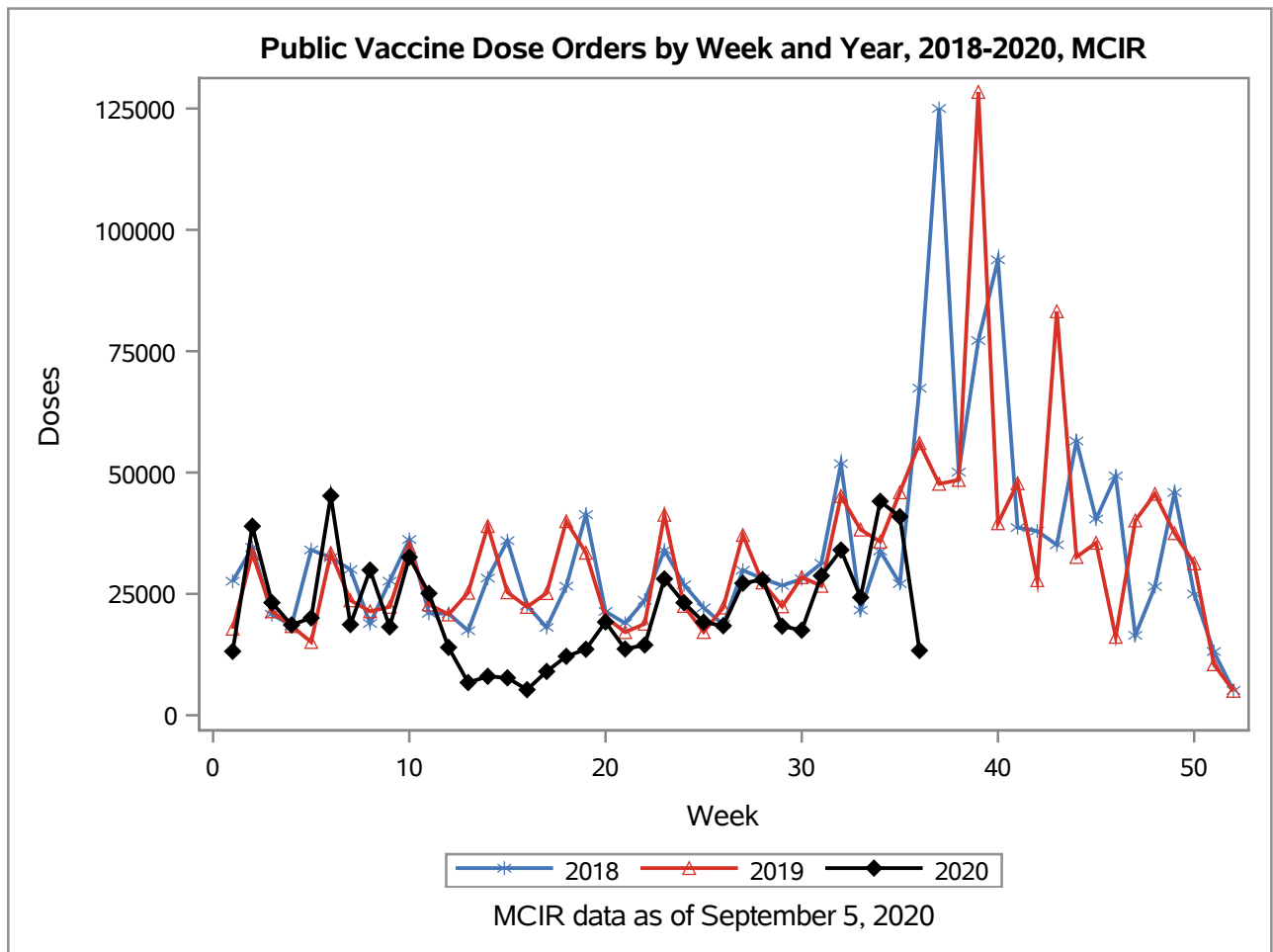


**Figure 4. Estimated 4:3:1:3:3:1:4* Vaccination Coverage,
Children 19 through 35 months,
Michigan Care Improvement Registry, January 2011 - August 2020**



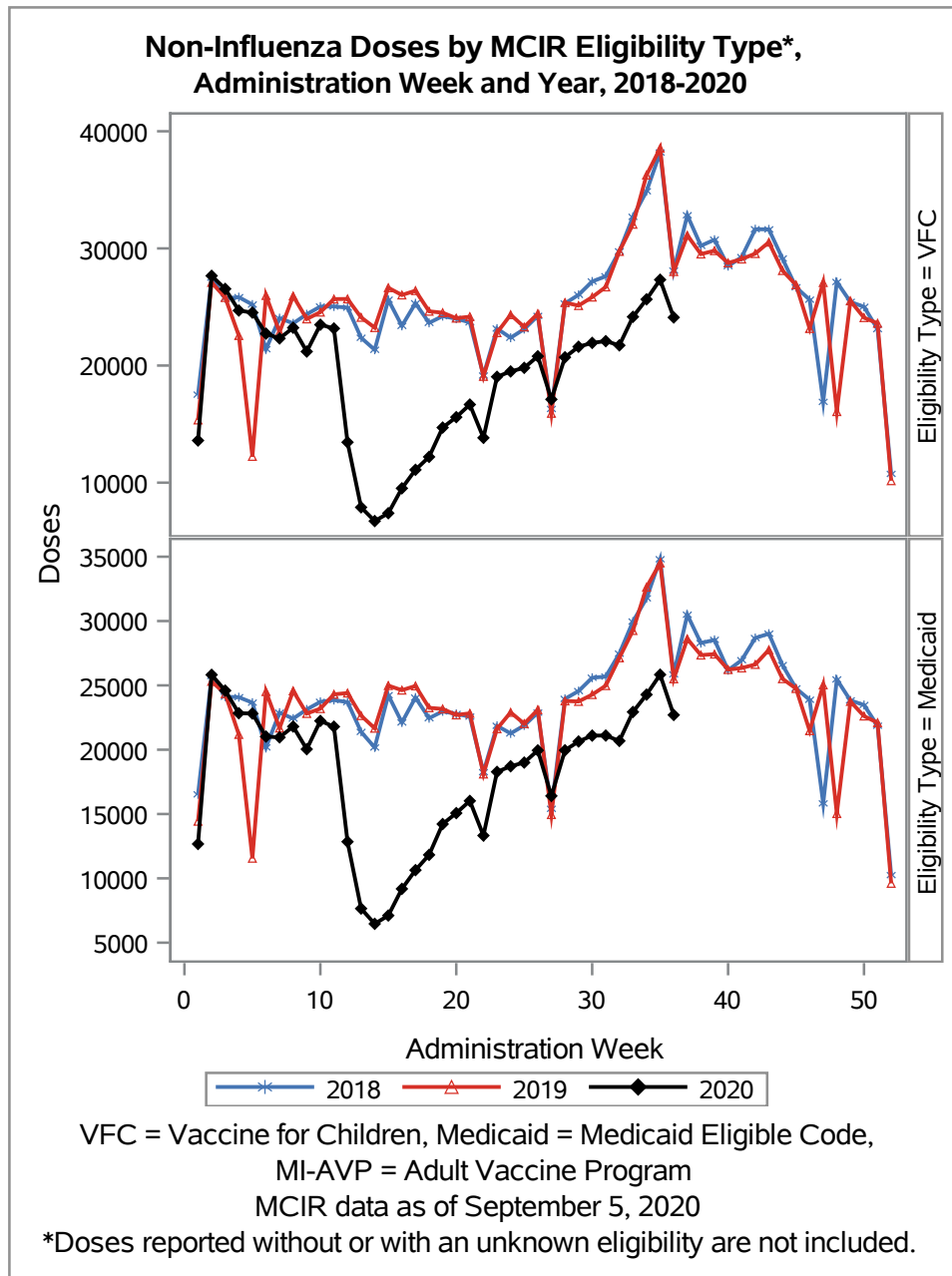
4313314 series: 4 DTaP, 3 Polio, 1 MMR, 3 Hib, 3 HepB, 1 Varicella, 4 PCV

3. Public Dose Orders

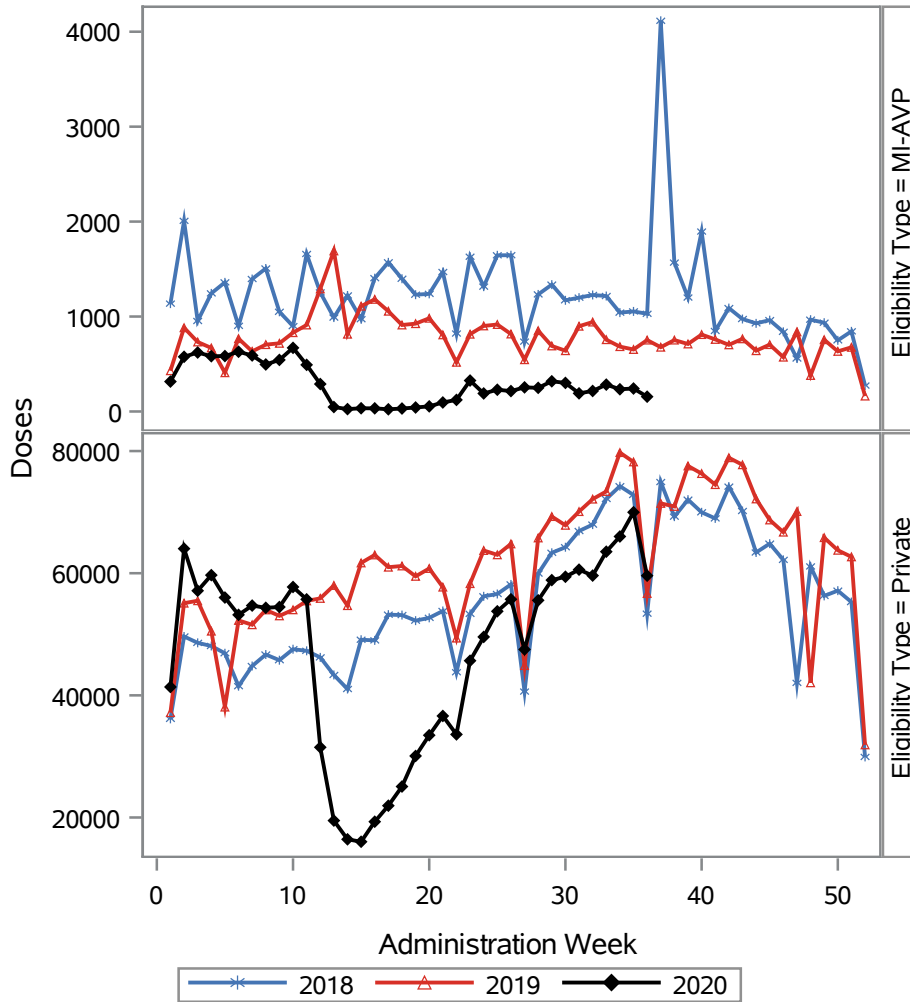


4. Doses by Eligibility

Please note that the vertical scales are adjusted for each eligibility type.



Non-Influenza Doses by MCIR Eligibility Type*, Administration Week and Year, 2018-2020



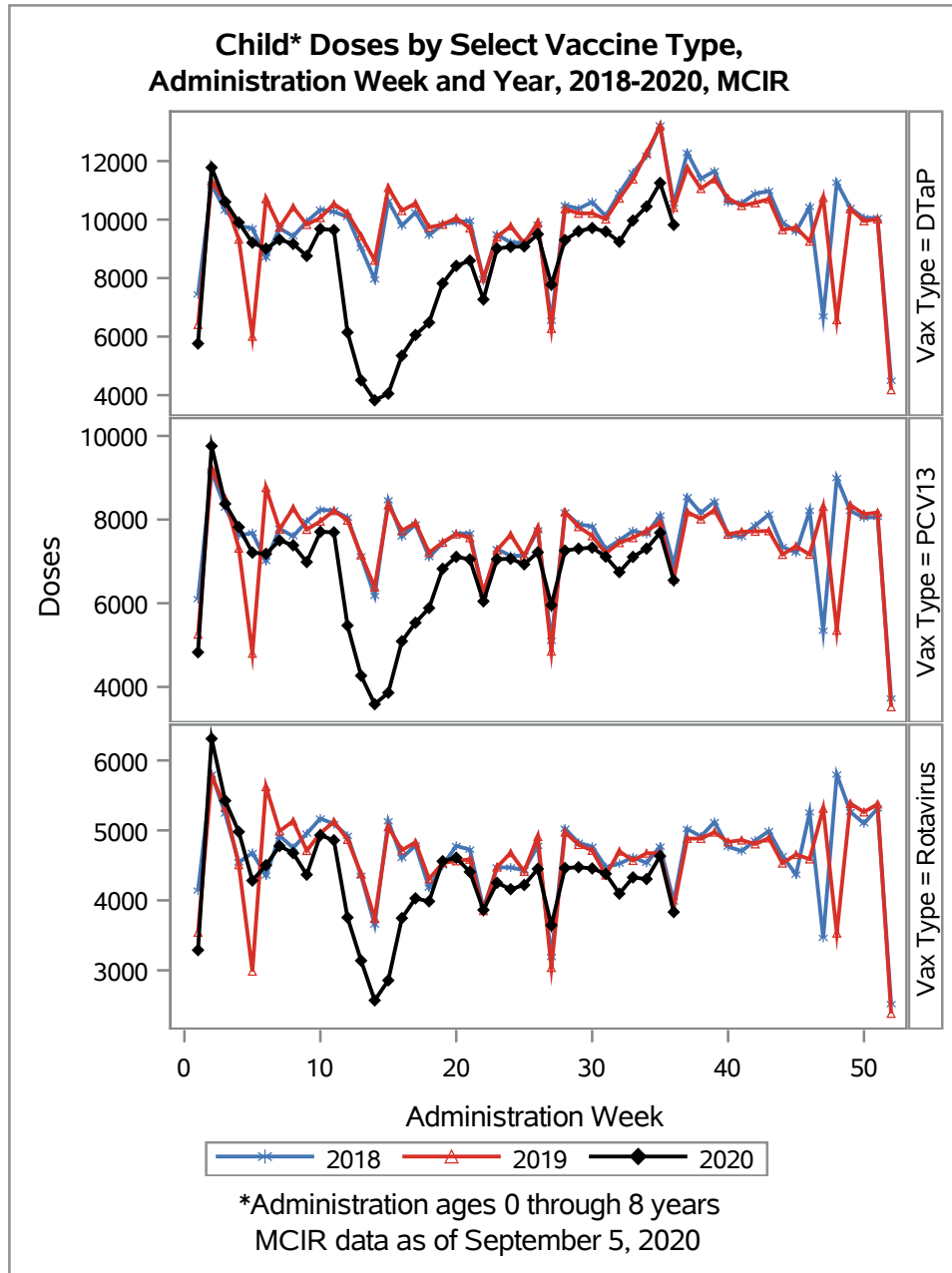
VFC = Vaccine for Children, Medicaid = Medicaid Eligible Code,
 MI-AVP = Adult Vaccine Program

MCIR data as of September 5, 2020

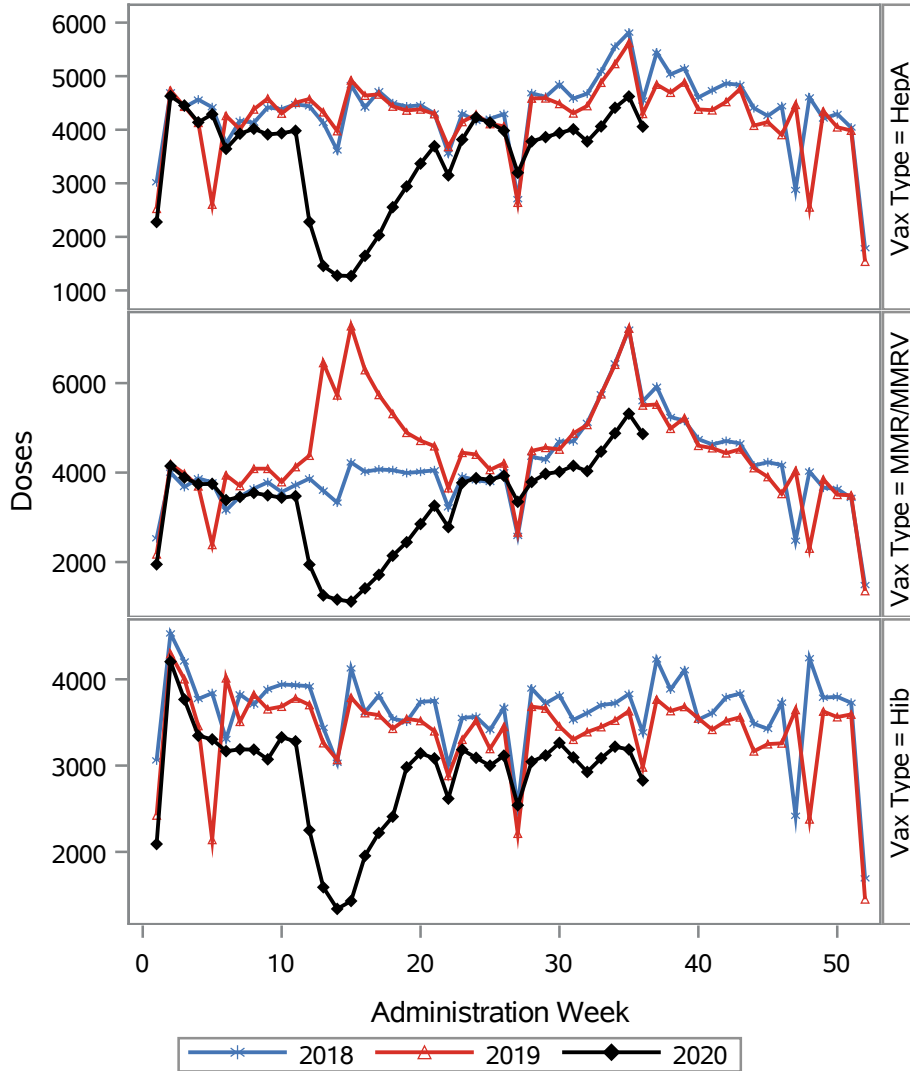
*Doses reported without or with an unknown eligibility are not included.

5. Doses by Vaccine Type and Age Group

Please note that the vertical scales are adjusted for each vaccine type and age group. Vaccine types are ordered by decreasing frequency of doses reported.

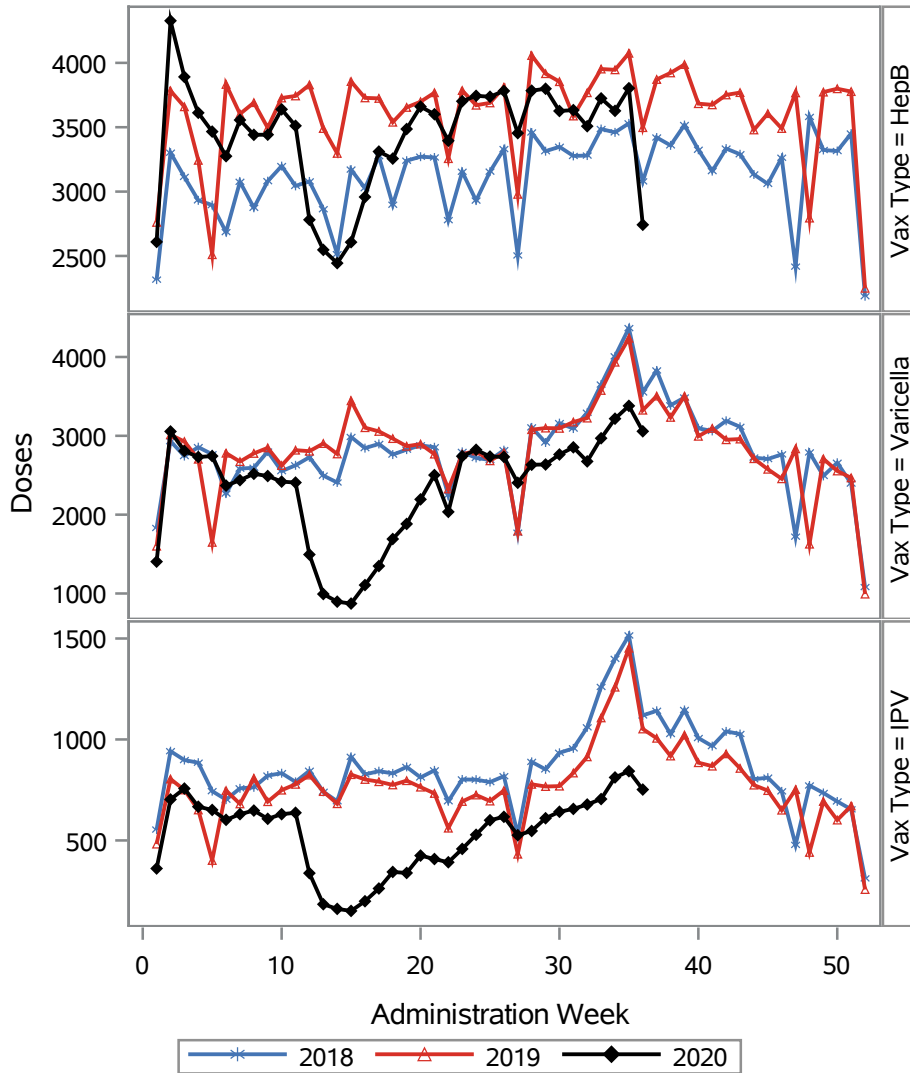


Child* Doses by Select Vaccine Type, Administration Week and Year, 2018-2020, MCIR



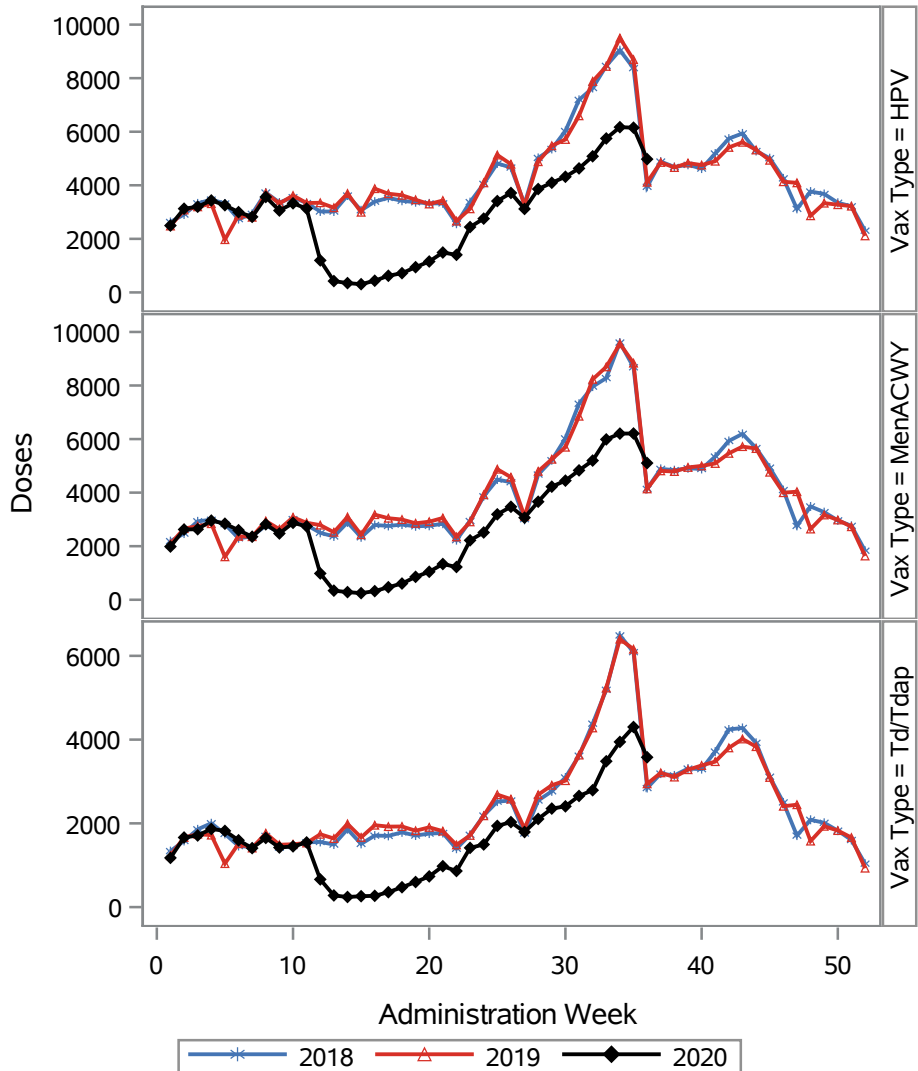
*Administration ages 0 through 8 years
MCIR data as of September 5, 2020

Child* Doses by Select Vaccine Type, Administration Week and Year, 2018-2020, MCIR



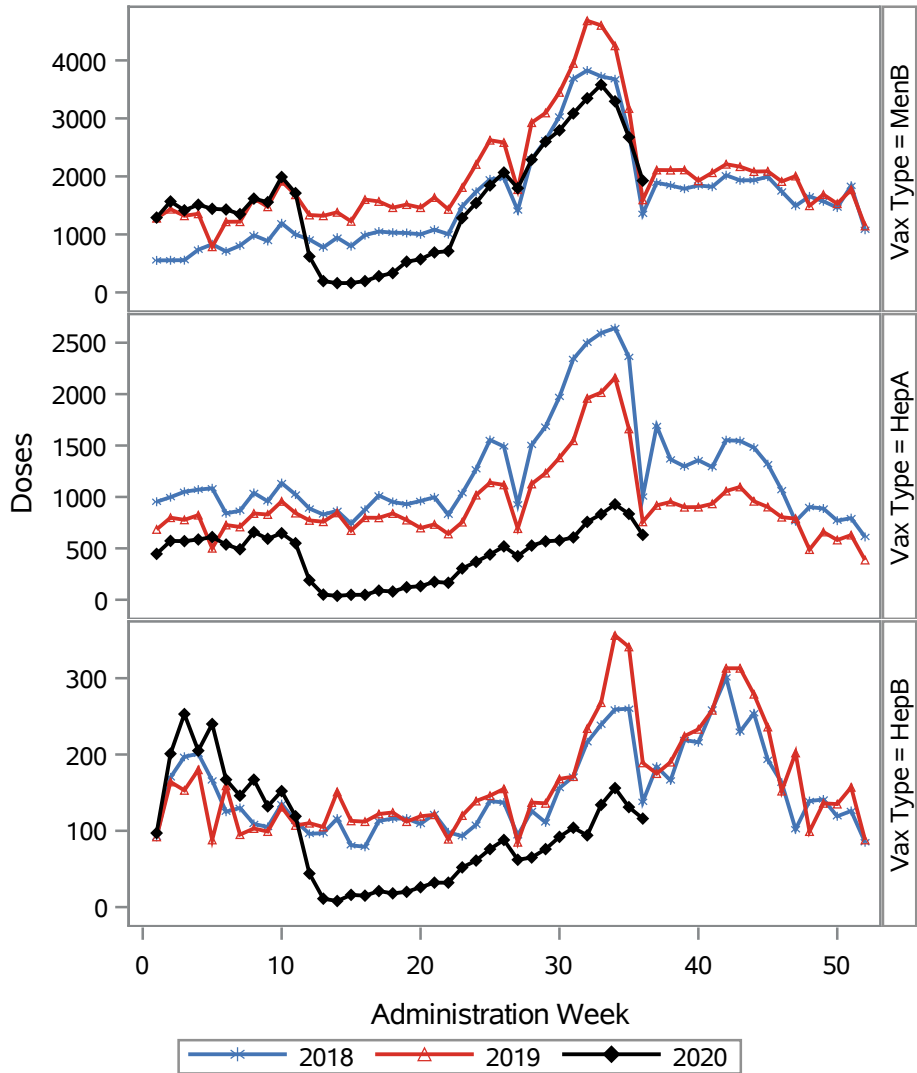
*Administration ages 0 through 8 years
MCIR data as of September 5, 2020

Adolescent* Doses by Select Vaccine Type, Administration Week and Year, 2018-2020, MCIR



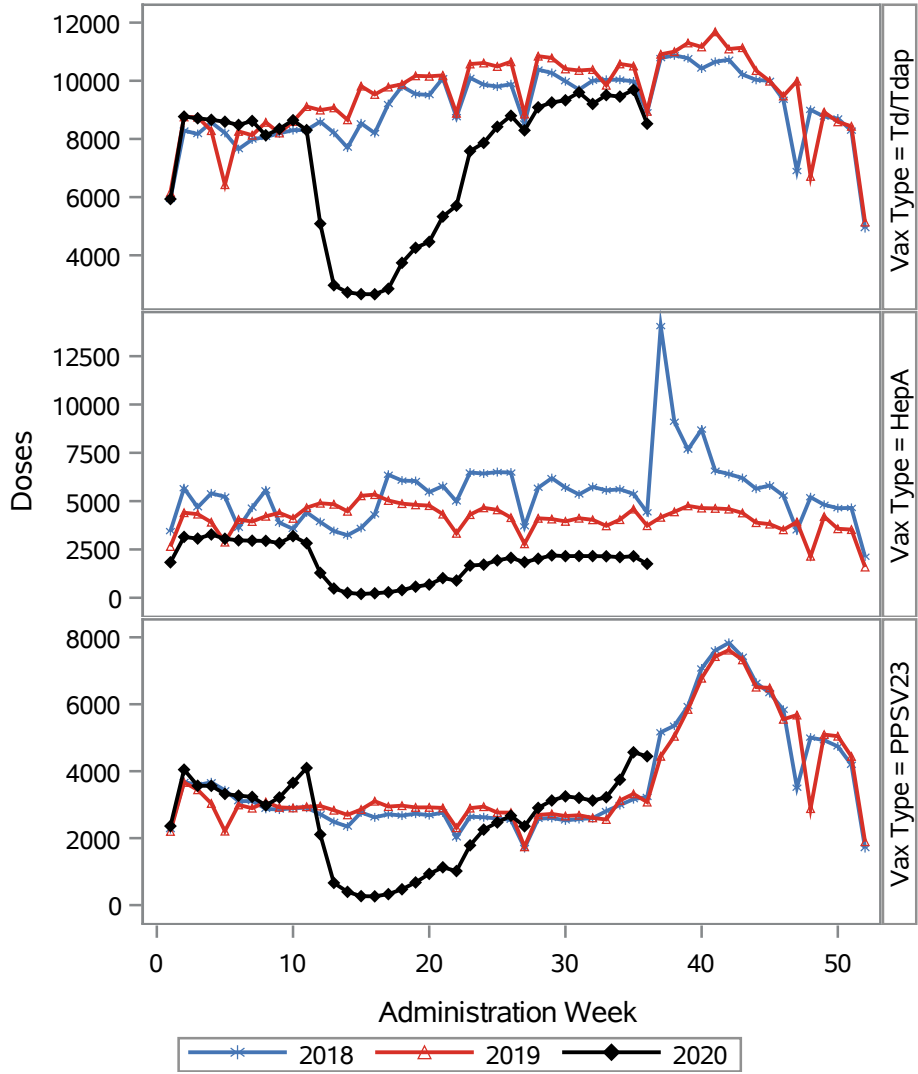
*Administration ages 9 through 18 years
MCIR data as of September 5, 2020

Adolescent* Doses by Select Vaccine Type, Administration Week and Year, 2018-2020, MCIR



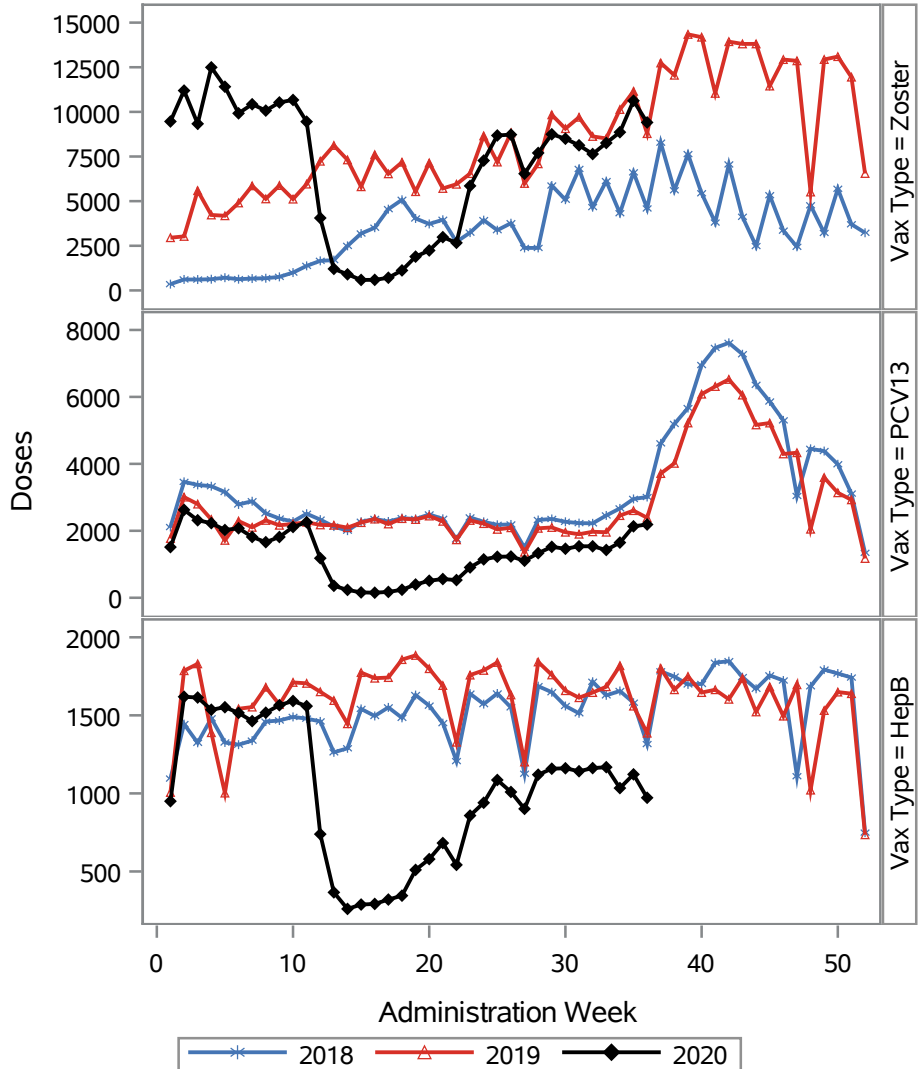
*Administration ages 9 through 18 years
MCIR data as of September 5, 2020

Adult* Doses by Select Vaccine Type, Administration Week and Year, 2018-2020, MCIR



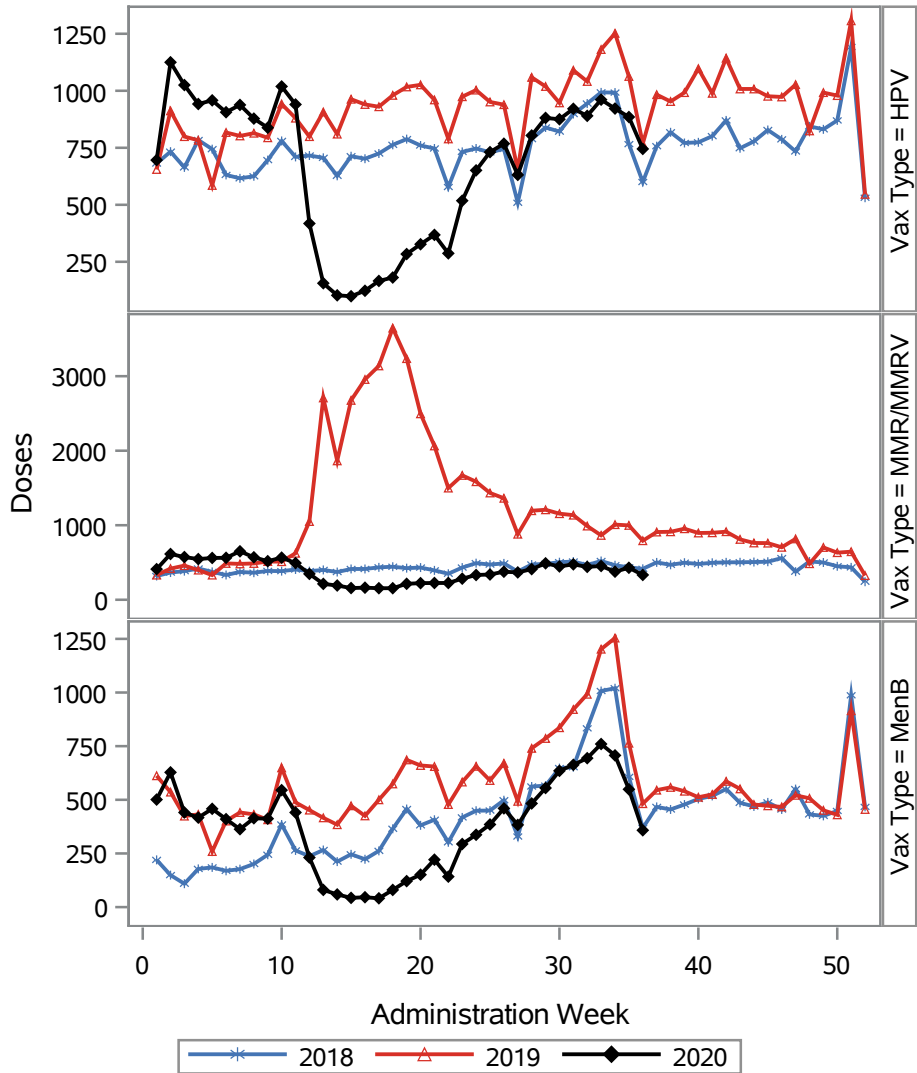
*Administration ages 19 through 105 years
MCIR data as of September 5, 2020

Adult* Doses by Select Vaccine Type, Administration Week and Year, 2018-2020, MCIR



*Administration ages 19 through 105 years
MCIR data as of September 5, 2020

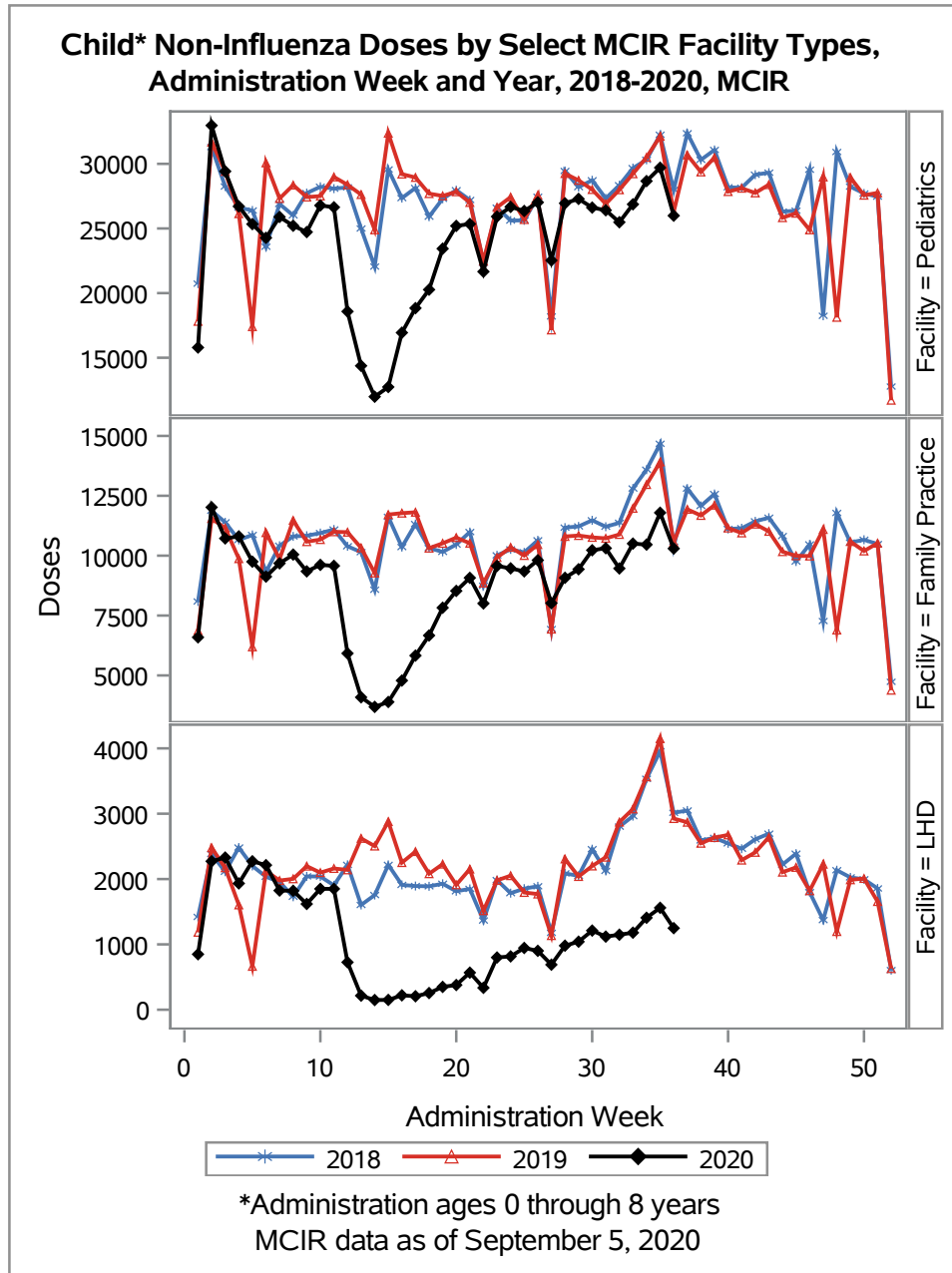
Adult* Doses by Select Vaccine Type, Administration Week and Year, 2018-2020, MCIR



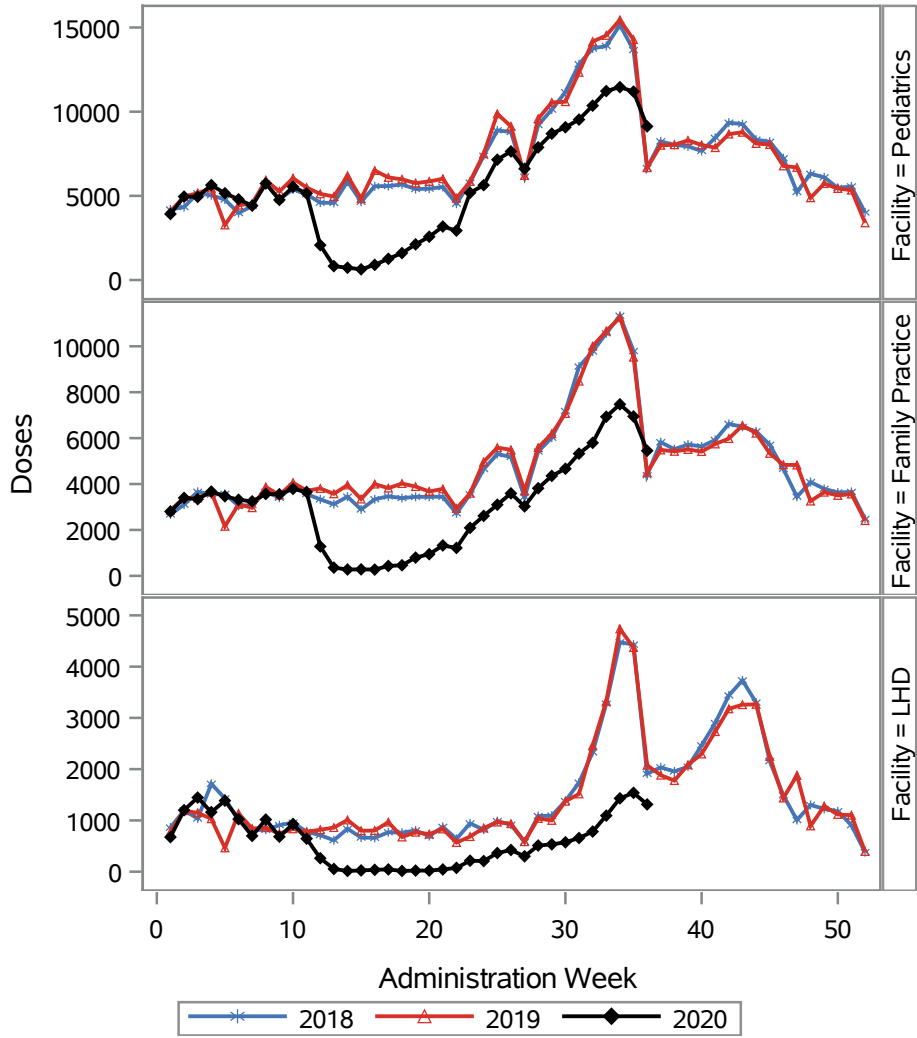
*Administration ages 19 through 105 years
MCIR data as of September 5, 2020

6. Doses by MCIR Facility Type and Age Group

Please note that the vertical scales are adjusted for each facility type and age group. Facility types are ordered by decreasing frequency of doses reported.

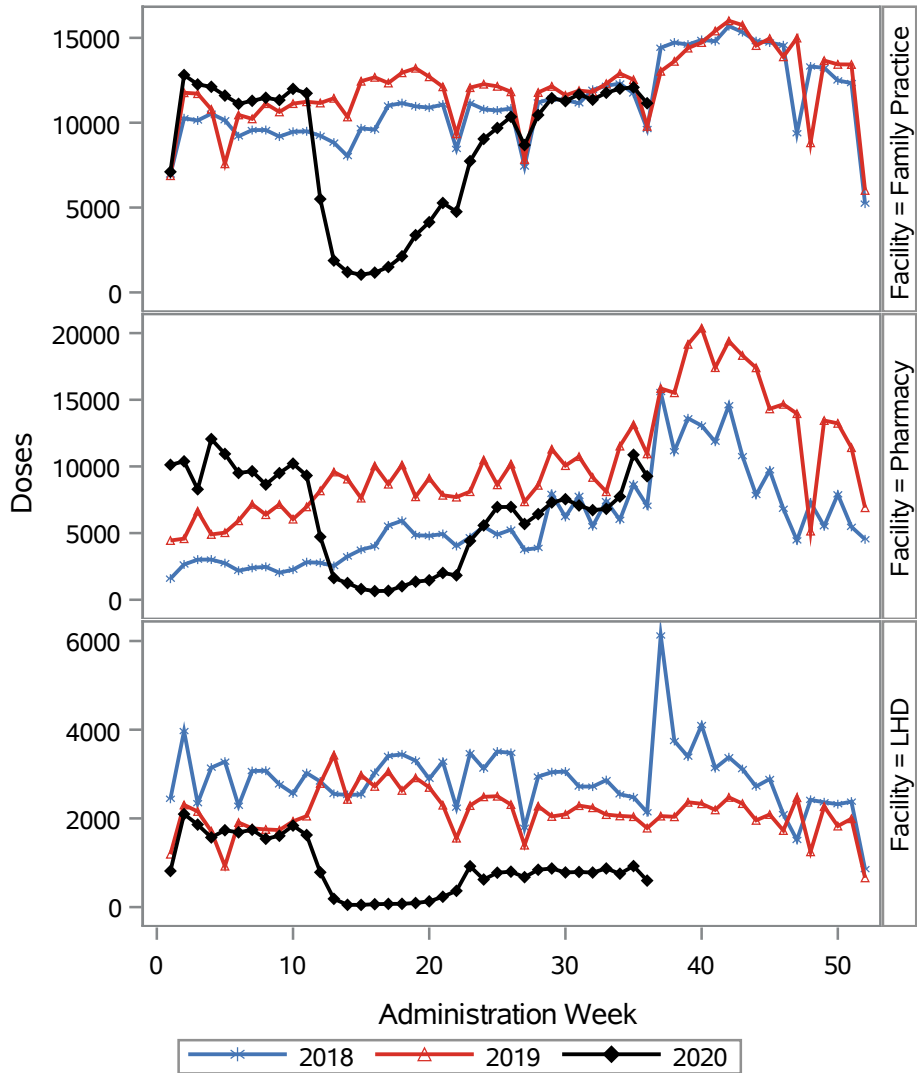


**Adolescent* Non-Influenza Doses by Select MCIR Facility Types,
Administration Week and Year, 2018-2020, MCIR**



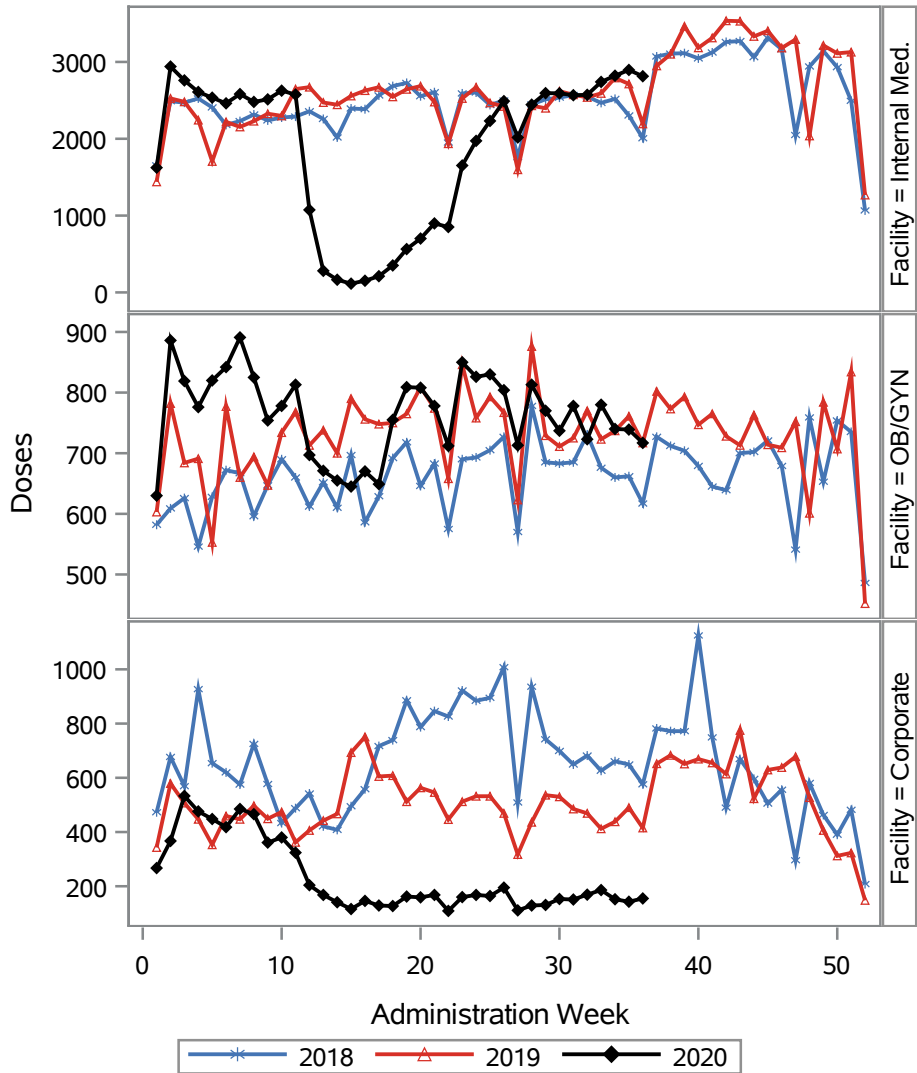
*Administration ages 9 through 18 years
MCIR data as of September 5, 2020

Adult* Non-Influenza Doses by Select MCIR Facility Types, Administration Week and Year, 2018-2020, MCIR



*Administration ages 19 through 105 years
 MCIR data as of September 5, 2020

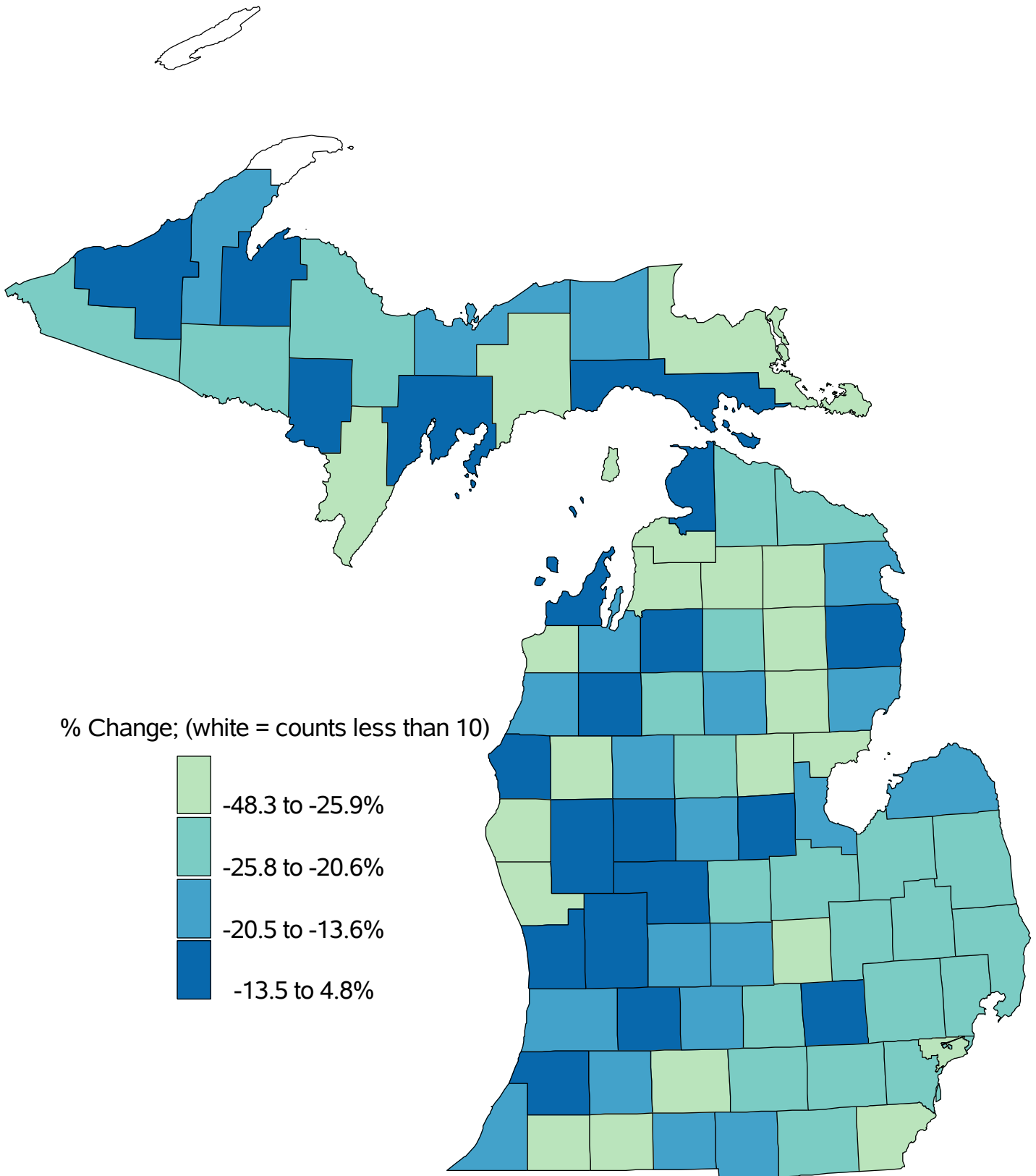
Adult* Non-Influenza Doses by Select MCIR Facility Types, Administration Week and Year, 2018-2020, MCIR



*Administration ages 19 through 105 years
 MCIR data as of September 5, 2020

7. Percent Change in Doses Administered by County

Percent Change* in Doses Administered and Reported to the MCIR Across the Lifespan by County^ January - August 2018-19 Average vs. 2020 Average



*Percent change in non-influenza doses reported, 2018-19 Average vs 2020 Average.

^Based on reporting facility county.

Prepared by the Michigan Department of Health and Human Services Immunization Division using data from the Michigan Care Improvement Registry (MCIR).