

Routine child, adult vaccinations fell amid COVID-19

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A pair of new studies yesterday details lower rates of routine vaccinations amid the COVID-19 pandemic, one showing reduced weekly immunization rates and up-to-date status in US children, and the other identifying fewer vaccine doses among both kids and adults in Michigan.



Fewer children up to date on immunizations

An observational [study](#) published in *JAMA Pediatrics* analyzed data from US health systems participating in the Vaccine Safety Datalink, an ongoing collaboration between health plans and the Centers for Disease Control and Prevention.

Eight health systems from California, Colorado, Minnesota, Oregon, Washington, and Washington contributed data on children 0 to 18 years from before and during the pandemic. Of the roughly 1.4 million children in 2019 and 2020, 49.0% were female, 11.9% were Asian, 32.1% were Hispanic, 7.2% were Black, and 32.4% were White.

Relative to 2019 and Jan 5 to Mar 14, 2020 (prepandemic), the period of Mar 15 to May 16, 2020 (age-limited preventive care) saw lower weekly recommended childhood vaccination rates—such as for measles, mumps, and rubella—per 1,000 population for all age-groups (eg, 160.1 in 2020 vs 194.6 in 2019 in those younger than 24 months).

Relative to the period of age-limited preventive care, weekly vaccination rates were higher in all age-groups, but still low, from May 17 to Oct 3, 2020 (expanded primary care; 160.1 per 1,000 vs 181.8).

Seventy-four percent of 7-month-old infants and 57% of those 18 months old were current on their vaccinations in September 2020, compared with 81% and 61%, respectively, in the same month the year before and 72% and 56% in May 2020.

Lower proportions of vaccinations among 13-year-old children were also observed in September (56% vs 58% in May). By September, similar proportions of 6- and 18-year-olds were as up to date on routine immunizations as those before the pandemic.

Racial disparities identified

The proportion up to date on their vaccinations was lowest among Black children of most age-groups before and during the pandemic. For example, 70% of Black 7-month-old infants were current in May 2019, compared with 82% of all infants of that age combined.

Racial differences in being current on vaccinations also differed by age-group, at 88% of 7-month-old Asian children, 61% of Black infants, and 76% and 41% of Asian and Black 18-month-olds, respectively, in September. In the same month, Black and White 13-year-olds had the lowest rates of up-to-date status, with 51% each; Black and White 18-year-olds also had the lowest rates, at 59% and 55%, respectively.

"Interventions are needed to promote catch-up vaccination, particularly focusing on populations in which disparities in vaccination coverage were evident prior to the pandemic," the researchers wrote.

In a [commentary](#) in the same journal, Brian Jenssen, MD, MSHP, of the University of Pennsylvania at Philadelphia, and Alexander Fiks, MD, MSCE, of Children's Hospital of Philadelphia, said that lower vaccination rates and coverage amid the pandemic may have long-term consequences until pediatric health systems and advocates encourage parents to take their children for catch-up immunizations.

"Health care system changes, such as reminding and offering vaccination in a variety of settings, and policy changes, such as vaccine mandates, will be essential in providing the impetus for families to re-engage with care and achieve timely and complete vaccination of children and adolescents," Jenssen and Fiks wrote.

Steepest drops in April 2020

In a [study](#) published in the *American Journal of Public Health*, a team led by Children's Hospital of Philadelphia (CHOP) researchers mined Michigan vaccination registry data for routine child and adult vaccinations from 2018 to September 2020.

Of 12 million vaccine doses, 48.6% were given to children aged 0 to 8 years, 15.6% were administered to adolescents 9 to 18 years, and 35.8% were given to adults 19 to 105. Overall doses fell starting in February 2020, with peak reductions (63.3%) in April 2020.

In all age-groups, the steepest declines in vaccinations occurred in April 2020 among adolescents (85.6%), followed by children 2 to 8 years (82.7%), adults (82.2%), and children younger than 2 years (34.9%).

Declines in doses administered were seen in all settings except for obstetrics and gynecology offices and pharmacies, and local health departments reported a 66.4% reduction. The number of sites offering pediatric vaccines decreased, while childhood vaccination coverage dipped 4.4% in children enrolled in Medicaid.

"As we strive to achieve pre-pandemic levels of routine vaccines, it is vital to ensure catch-up vaccination of doses missed throughout the pandemic to stem outbreaks of vaccine-preventable diseases like measles," study first author Angela Shen, ScD, MPH, said in a [CHOP press release](#). "Both adult and pediatric providers must identify which patients need catch-up doses and make sure those individuals get vaccinated, so that we don't see a resurgence of viruses that we have the tools to prevent."

The researchers recommended using statewide vaccination data systems to supplement electronic health records in identifying patients due for vaccinations and contacting them to schedule appointments, expanding clinic hours and appointment times, and asking providers to ask every patient whether they are up to date on their vaccinations and either give a vaccination or refer them for one.

"As society shifts to a new normal, recalibrating to a world where SARS-CoV-2 is endemic, COVID-19 vaccines will certainly transition onto the routine immunization schedule in some form," Shen said. "It is critical to ensure the immunization delivery system supports timely, accessible, and reliable access to routinely recommended vaccines across the nation, sustaining historical high coverage in children and strengthening increasing coverage for adolescents and adults."