

Pennsylvania Trend Analysis in Childhood Immunizations from March 15, 2020 to June 30, 2020

On March 13 a national pandemic was declared with various statewide stay at home and shelter in place orders. Some research has shown that this response to the COVID_19 pandemic negatively impacted the administration of relevant vaccines (those that are routinely recommended for patients within each age group).

On March 6, Pennsylvania recorded the first cases of COVID-19. Beginning on March 12, the Governor and the Secretary of Health issued stay at home orders which eventually applied to the entire state. The impact on immunizations from March 15 – June 30, 2020 was analyzed at the state level to see if there were similar trends in the administration of relevant vaccines*.

Metrics of relevant vaccines administered were calculated per 100,000 patients resulting in the rate of patients receiving a relevant immunization. By including only relevant vaccines, the data remain directly tied to required immunizations.

Patients included in these analyses are required to have active status within the Pennsylvania State Immunization Information System (PA SIIS) and be a known resident, based on zip code, of the PA SIIS jurisdiction (this includes all counties except Philadelphia County).

Vaccine ordering and administration saw a heavy impact due to the COVID-19 pandemic, especially in the months of April and May 2020. While the numbers have increased in June and July, we are not yet consistently returned to historic levels. Overall for this four-month period, we are still below the average when compared to the last few years. Thankfully, infants (0 – 11 months) had the lowest decline in vaccination rates, which is good news since this is a key time for the vaccination process. The age groups that saw the most impact were children and adolescents (4 – 6 years, 7 – 10 years, and 11 – 18 years) and older adults (65+ years).

For the time period of March 15 – June 30, the rate of unique patients served for vaccinations are down the following percentages, when comparing 2020 to the average from 2016-2019:

- 0 – 11 months – 14.4 percent
- 1 – 3 years – 47.3 percent
- 4 – 6 years – 76.3 percent
- 7 – 10 years – 68.5 percent
- 11 – 18 years – 72.3 percent
- 19 – 49 years – 42.9 percent
- 50 – 64 years – 38.4 percent
- 65+ years – 69 percent

Note: This data reflects immunizations reported by participating providers registered in PA SIIS. This registry is voluntary so this does not capture all providers or immunizations in the state.

***Effects of the COVID-19 Pandemic on Routine Pediatric Vaccine Ordering and Administration — United States, 2020 *Weekly* / May 15, 2020 / 69(19);591–593**