



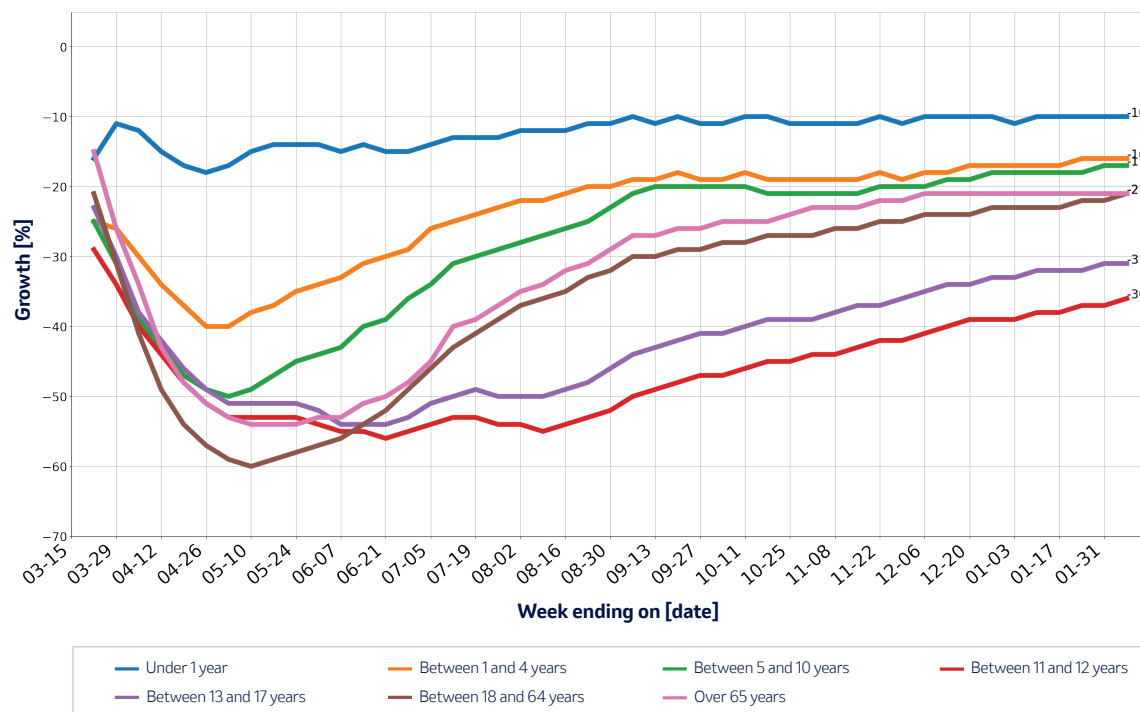
THE PANDEMIC IMPACT

on Wellness Visits and Vaccinations
for Children and Adolescents



THE TIME TO ACT IS NOW: Numerous reports have documented a marked drop in vaccination and prevention services during the pandemic.¹

2020-2021 US national wellness visits cumulative change vs 2017-2019 three year average, for the same time period²



All age cohorts have seen a decrease in wellness visits during the COVID-19 pandemic, with **adolescent** age cohorts most impacted.²

WELLNESS VISITS ARE ESSENTIAL for many reasons, including getting recommended routine vaccinations for children and adolescents.^{3,4}

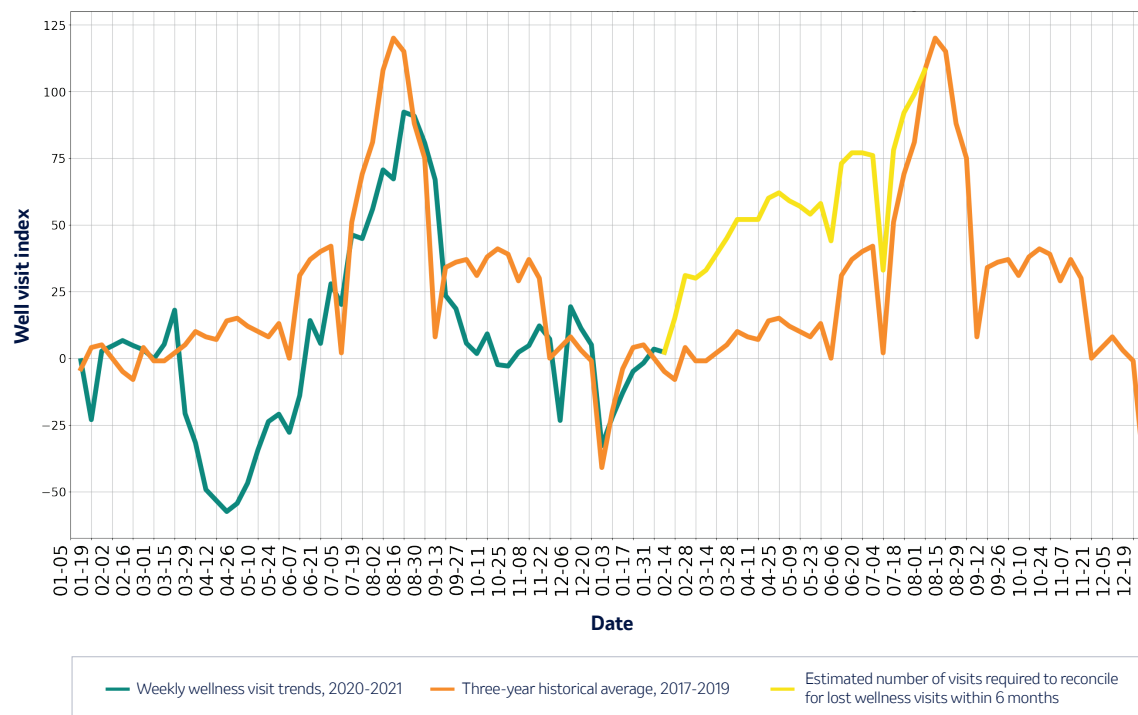
Data Sources: HealthVerity COVID-19 Surveillance and Utilization Syndicated Weekly Offering, 2020-2021; Optum’s Insight Clinformatics Data Mart, 2017-2019.²

References: **1.** Barach P, Fisher SD, Adams MJ, et al. Disruption of healthcare: Will the COVID pandemic worsen non-COVID outcomes and disease outbreaks? *Prog Pediatr Cardiol.* 2020;59:101254. doi:10.1016/j.ppedcard.2020.101254 **2.** Data available on request from Merck & Co., Inc, Professional Services-DAP, WP1-27, PO Box 4, West Point, PA 19486-0004. Please specify information package US-NON-07434. **3.** Centers for Disease Control and Prevention (CDC). Vaccines: Well-child visits are essential. Last reviewed June 14, 2020. Accessed March 23, 2021. <https://www.cdc.gov/vaccines/parents/why-vaccinate/well-child-visits.html> **4.** Centers for Disease Control and Prevention (CDC). Recommended child and adolescent immunization schedule for Ages 18 years or younger, 2021. Published February 11, 2021. Accessed March 23, 2021. <https://www.cdc.gov/vaccines/schedules/downloads/child/0-18yrschild-combined-schedule.pdf>



COMMUNITY MITIGATION MEASURES such as shelter-in-place orders resulted in declines in outpatient pediatric visits and fewer vaccine doses administered during the COVID-19 pandemic, leaving children and adolescents at risk for vaccine-preventable diseases.^{1,2}

US national wellness visit trends and catch-up simulation (between 5 and 10 years old)³



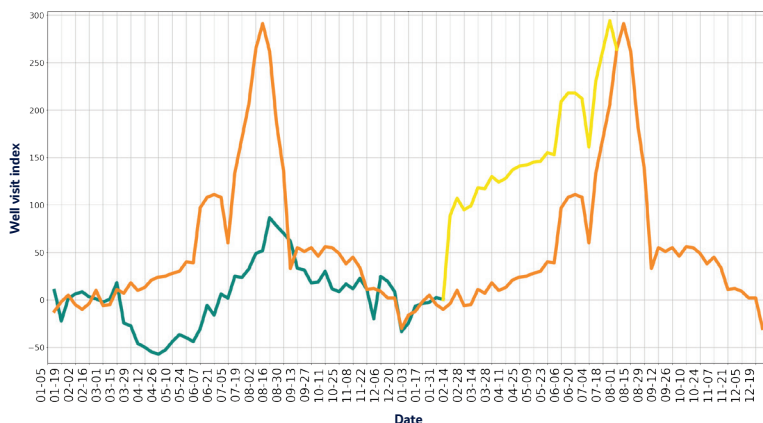
As a result of the recent declines in the routine vaccination rates, the CDC has released guidance stating that recommended routine vaccinations are an **ESSENTIAL PREVENTIVE HEALTH SERVICE** that should be maintained.⁴⁻⁶

Data Sources: HealthVerity COVID-19 Surveillance and Utilization Syndicated Weekly Offering, 2020-2021; Optum's Insight Clinformatics Data Mart, 2017-2019.³

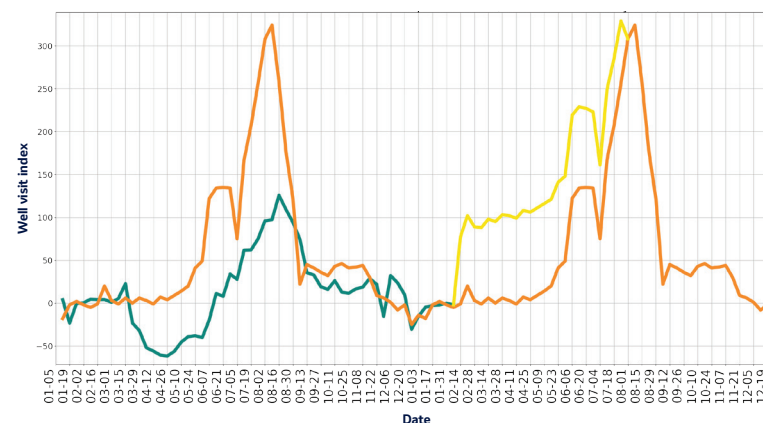
References: **1.** Centers for Disease Control and Prevention (CDC). COVID-19: Information for pediatric healthcare providers. Updated December 30, 2020. Accessed March 15, 2021. <https://www.cdc.gov/coronavirus/2019-ncov/hcp/pediatric-hcp.html> **2.** Santoli JM, Lindley MC, DeSilva MB, et al. Effects of the COVID-19 pandemic on routine pediatric vaccine ordering and administration - United States, 2020. *MMWR Morb Mortal Wkly Rep.* 2020;69(19):591-593. **3.** Data available on request from Merck & Co., Inc, Professional Services-DAP, WP1-27, PO Box 4, West Point, PA 19486-0004. Please specify information package US-NON-07434. **4.** Immunization Coalitions Network. Network news - November 4, 2020. Published November 4, 2020. Accessed March 23, 2021. <https://www.immunizationcoalitions.org/news20201104/#NN2> **5.** Centers for Disease Control and Prevention (CDC). Interim guidance for routine and influenza immunization services during the COVID-19 pandemic. Last reviewed October 20, 2020. Accessed March 23, 2021. <https://www.cdc.gov/vaccines/pandemic-guidance/index.html> **6.** Centers for Disease Control and Prevention (CDC). Routine vaccination during the COVID-19 outbreak. Last reviewed: July 27, 2020. Accessed March 23, 2021. <https://www.cdc.gov/vaccines/parents/visit/vaccination-during-COVID-19.html>

THERE IS URGENCY to vaccinate adolescents now; significant catch-up is needed, and recovery may be further complicated by pandemic response activities.¹⁻³

US national wellness visit trends and catch-up simulation (between 11 and 12 years old)⁴



US national wellness visit trends and catch-up simulation (between 13 and 17 years old)⁴



— Weekly wellness visit trends, 2020-2021 — Three-year historical average, 2017-2019 — Estimated number of visits required to reconcile for lost wellness visits within 6 months

As pandemic response activities could be expected to introduce greater complexity into recovery efforts during the 2021 back-to-school season, these are a few points to consider^{5,6}:

- Summertime is a peak time period for adolescents to complete wellness visits where preventative services, like the administration of recommended vaccinations, are addressed before or at the start of the school year.^{4,6,7}
- As younger populations become eligible to receive COVID-19 vaccines, thoughtful planning is essential to ensure they receive their routinely recommended and catch-up vaccinations.^{5,7}
- Currently there are no data or recommendations to support concomitant use of COVID-19 vaccine with other vaccines.⁵

Data Sources: HealthVerity COVID-19 Surveillance and Utilization Syndicated Weekly Offering, 2020-2021; Optum’s Insight Clinformatics Data Mart, 2017-2019.⁴

References: **1.** Immunization Coalitions Network. Network news – November 4, 2020. Published November 4, 2020. Accessed March 24, 2021. <https://www.immunizationcoalitions.org/news20201104/#NN2> **2.** Interim guidance for routine and influenza immunization services during the COVID-19 pandemic. Centers for Disease Control and Prevention (CDC). Last reviewed October 20, 2020. Accessed March 5, 2021. <https://www.cdc.gov/vaccines/pandemic-guidance/index.html> **3.** National Foundation for Infectious Diseases (NFID). Issue brief: The impact of COVID-19 on US vaccination rates. Published 2020. Accessed March 5, 2021. <https://www.nfid.org/keep-up-the-rates/issue-brief-the-impact-of-covid-19-on-us-vaccination-rates/> **4.** Data available on request from Merck & Co., Inc, Professional Services–DAP, WP1-27, PO Box 4, West Point, PA 19486-0004. Please specify information package US-NON-07434. **5.** Centers for Disease Control and Prevention (CDC). Interim clinical considerations for use of COVID-19 vaccines currently authorized in the United States. Last updated March 5, 2021. Accessed March 23, 2021. <https://www.cdc.gov/vaccines/covid-19/info-by-product/clinical-considerations.html> **6.** Lorick SA, Fishbein D, Weintraub E, et al. Uptake of meningococcal conjugate vaccine among adolescents in large managed care organizations, United States, 2005: demand, supply and seasonality. *BMC Infect Dis.* 2009;9:175. Published 2009 Nov 3. doi:10.1186/1471-2334-9-175. **7.** Centers for Disease Control and Prevention (CDC). Recommended child and adolescent immunization schedule for Ages 18 years or younger, 2021. Published February 11, 2021. Accessed March 23, 2021. <https://www.cdc.gov/vaccines/schedules/downloads/child/0-18yrschild-combined-schedule.pdf>



THE TIME TO ACT IS NOW

Now is the time to ensure children and adolescents receive their routinely recommended vaccinations.¹

The following are solutions that may support increased awareness, access, and uptake of routinely recommended vaccines:



1

Ensure that providers use every **OPPORTUNITY TO VACCINATE^{2,3}**

2

Ensure recommended office safety measures and appointment availability are **CLEARLY COMMUNICATED³**

3

IDENTIFY APPROPRIATE PATIENTS and utilize patient outreach programs through centralized Reminder Recall⁴

4

RAISE AWARENESS by incorporating digital and mainstream media campaigns as part of outreach programs^{5,6}

5

Consider alternate **VACCINATION OPPORTUNITIES**, such as curbside clinics or “drive-through” appointments³

References: **1.** Centers for Disease Control and Prevention (CDC). Recommended child and adolescent immunization schedule for Ages 18 years or younger, 2021. Published February 11, 2021. Accessed April 7, 2021. <https://www.cdc.gov/vaccines/schedules/downloads/child/0-18yrschild-combined-schedule.pdf> **2.** Immunization Coalitions Network. Network news - November 4, 2020. Published November 4, 2020. Accessed March 15, 2021. <https://www.immunizationcoalitions.org/news20201104/#NN2> **3.** Centers for Disease Control and Prevention (CDC). Interim guidance for routine and influenza immunization services during the COVID-19 pandemic. Last reviewed October 20, 2020. Accessed March 15, 2021. <https://www.cdc.gov/vaccines/pandemic-guidance/index.html> **4.** American Academy of Pediatrics (AAP). Immunizations. Reminder & recall systems. <https://www.aap.org/en-us/advocacy-and-policy/aap-health-initiatives/immunizations/Practice-Management/Pages/reminder-recall-systems.aspx>. Accessed April 1, 2021. **5.** Association of State and Territorial Health Officials (ASTHO). Communicating effectively about vaccines: New communication resources for health officials. Published 2010. Accessed March 23, 2021. <https://astho.org/Programs/Immunization/Communicating-Effectively-About-Vaccines--New-Communication-Resources-for-Health-Officials/> **6.** American Academy of Pediatrics (AAP). Immunization social media toolkit. Accessed March 31, 2021. <https://www.aap.org/en-us/advocacy-and-policy/aap-health-initiatives/immunizations/Practice-Management/Pages/Immunization-Social-Media-Toolkit.aspx>

