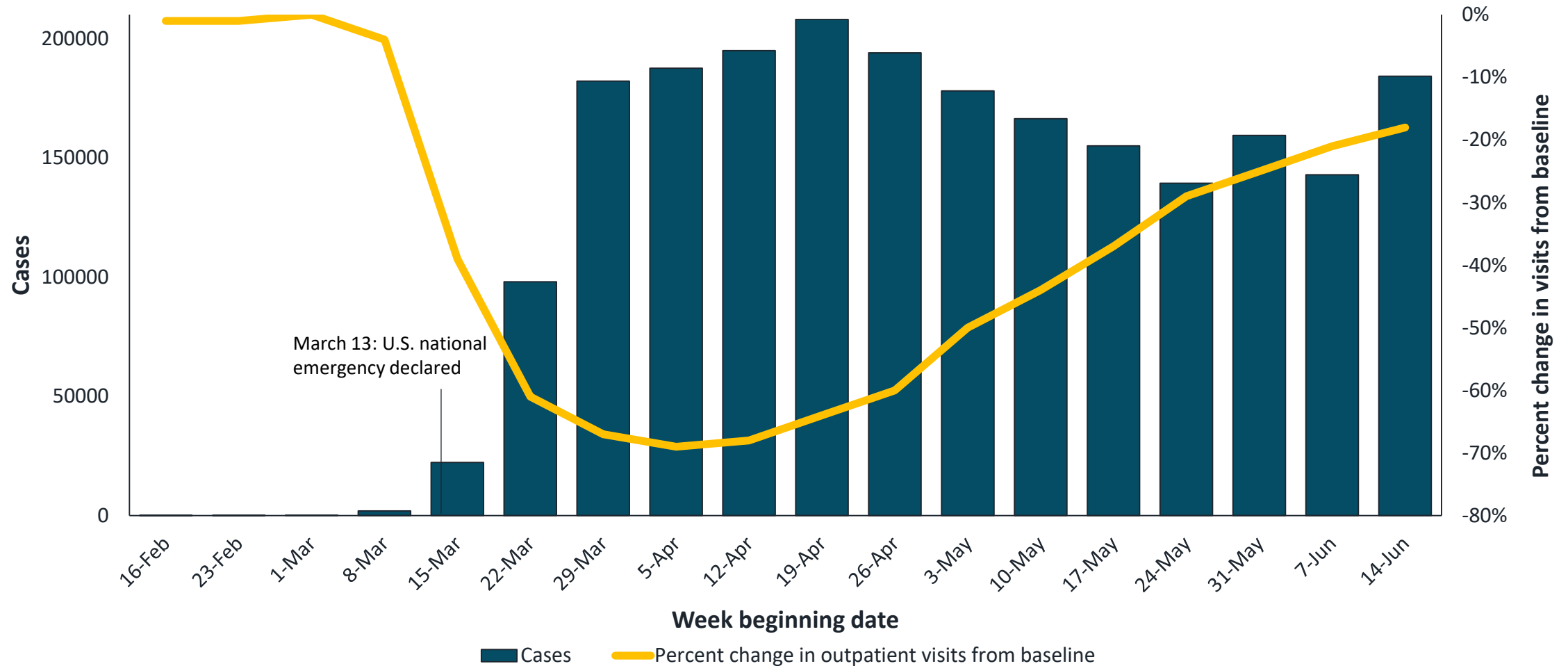


Maintaining and strengthening routine childhood vaccination during the COVID-19 pandemic

Sarah Mbaeyi, MD MPH
August 4, 2020

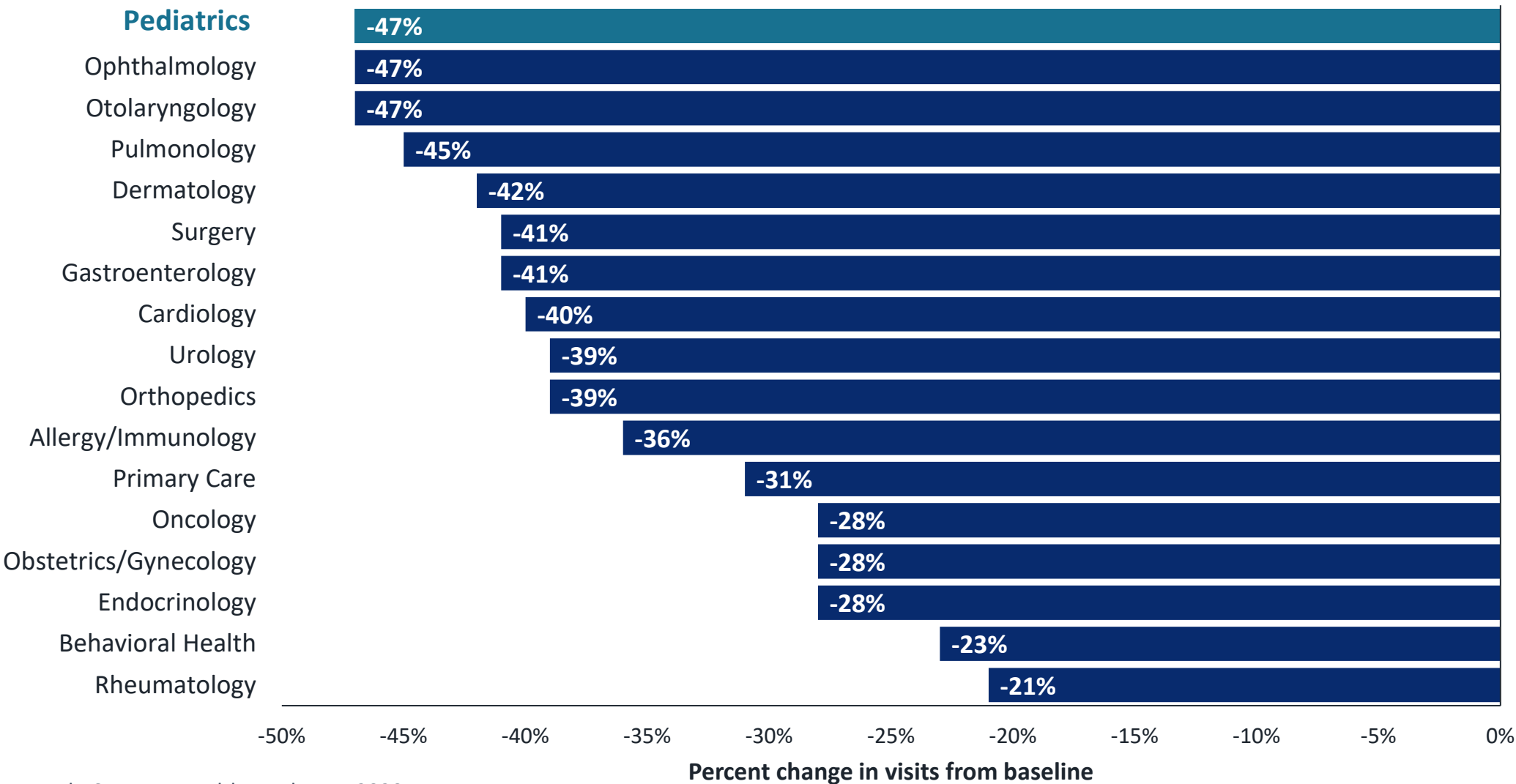
Substantial disruptions to outpatient medical care during COVID-19 pandemic

As number of COVID-19 cases increased and stay-at-home orders implemented, nearly 70% reduction in outpatient in-person visits before starting to rebound

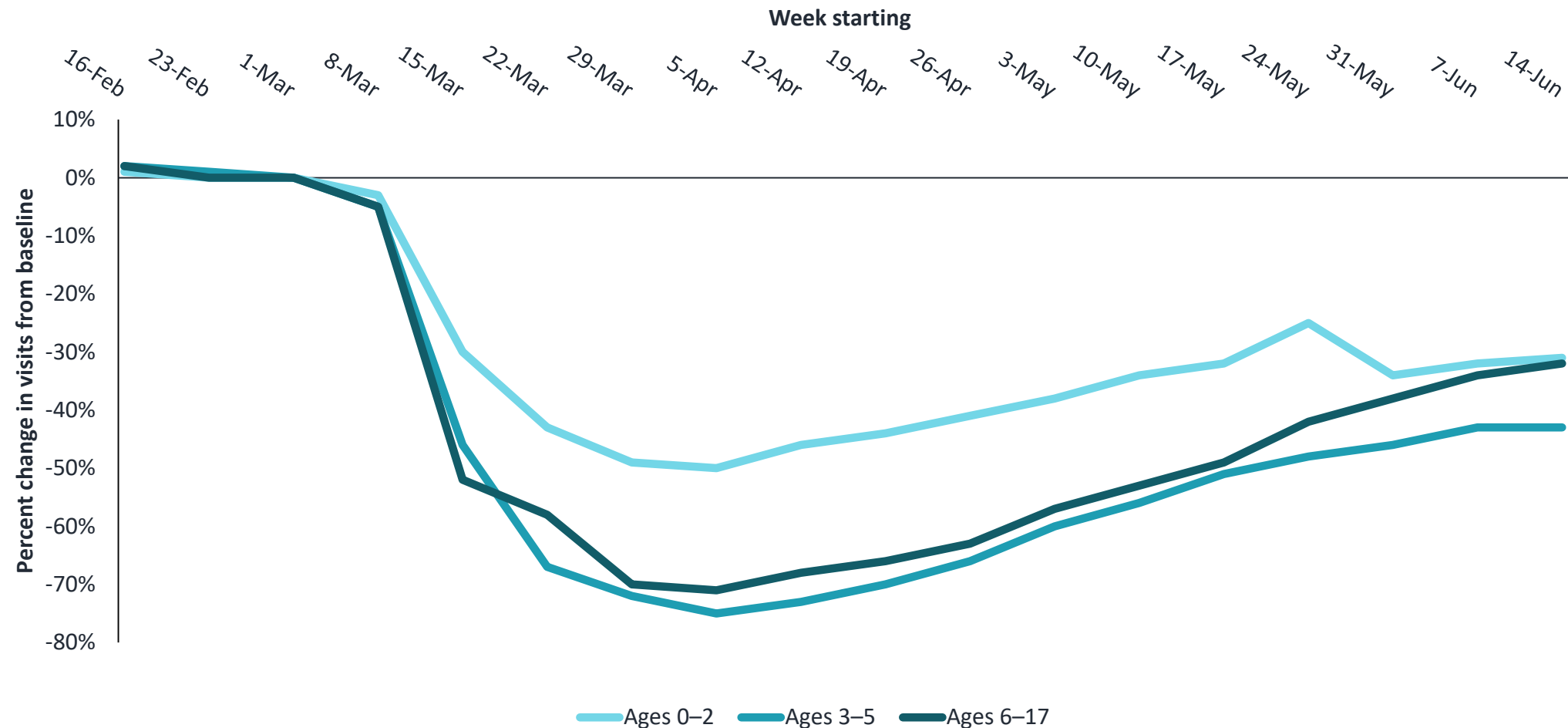


Pediatrics among the hardest-hit specialties

47% cumulative decline in visits from March 15 to June 20, 2020

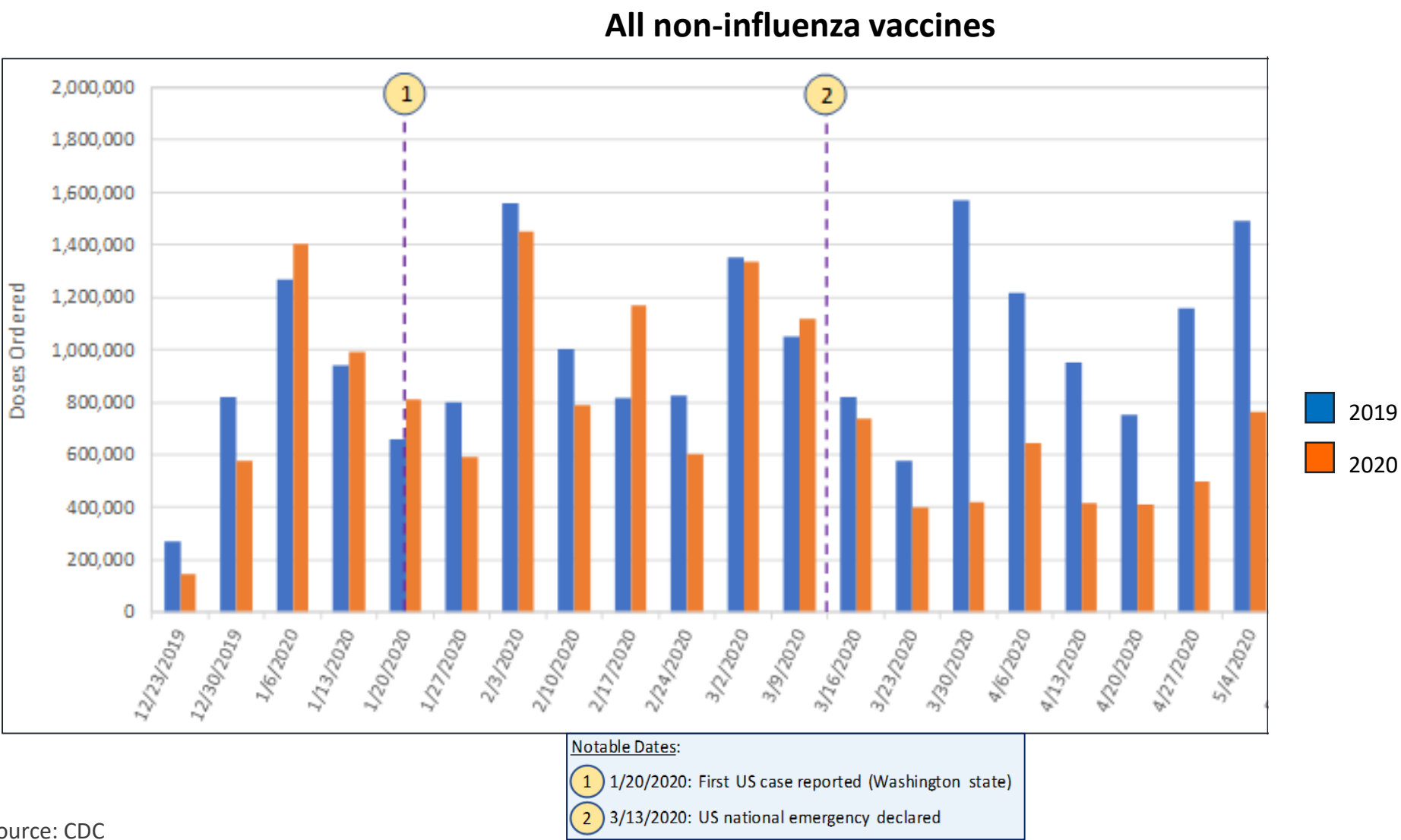


Disruptions in outpatient medical care among all pediatric age groups during COVID-19 pandemic



COVID-19 pandemic and disruptions to routine childhood vaccination

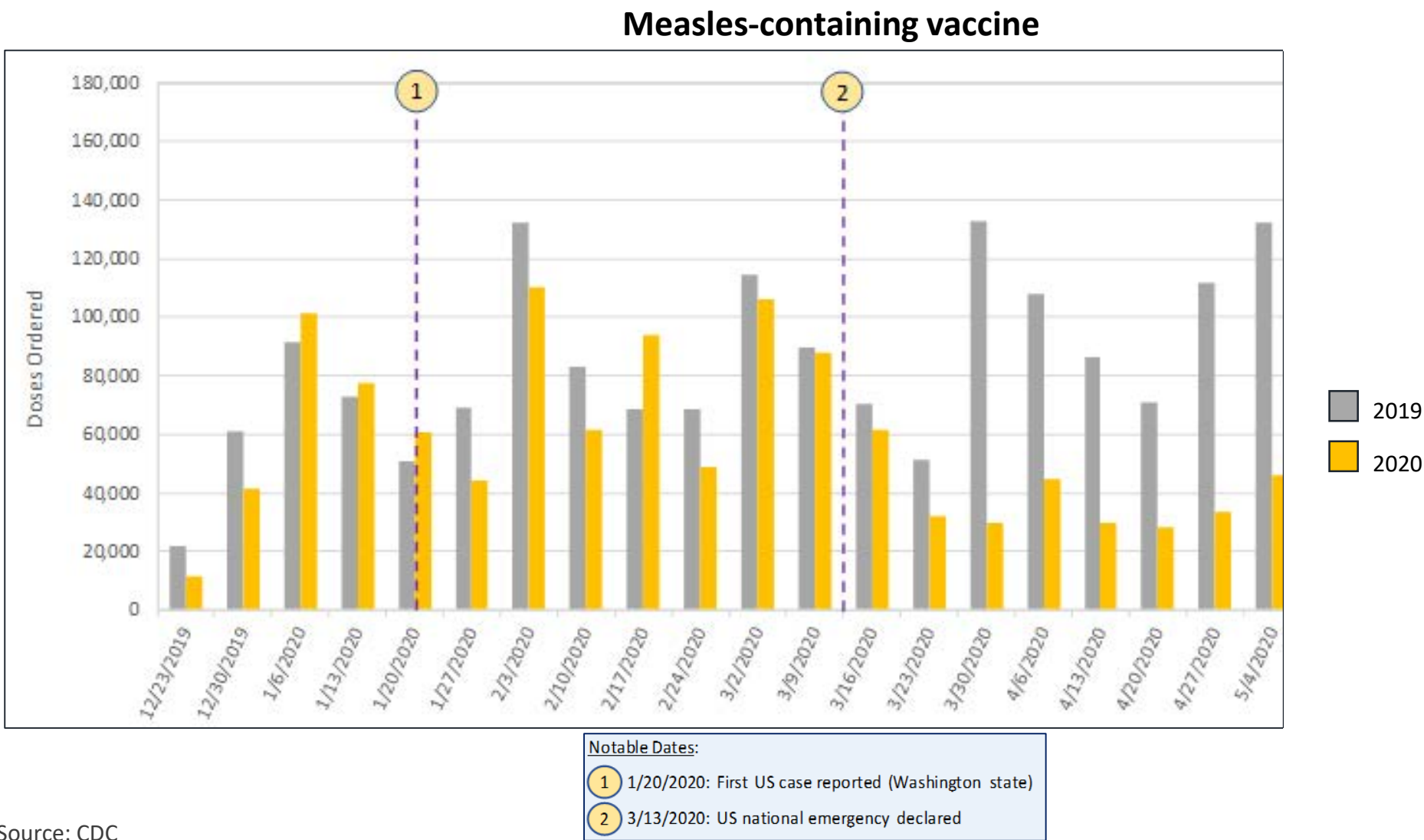
Weekly decreases in Vaccines for Children program provider orders for pediatric vaccines – United States, December 23, 2019-May 10, 2020



Source: CDC

COVID-19 pandemic and disruptions to routine childhood vaccination

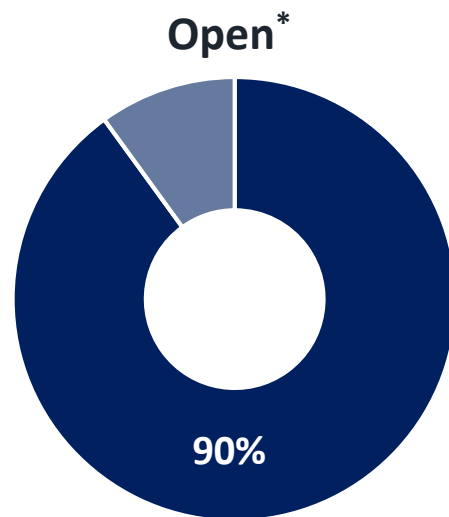
Weekly decreases in Vaccines for Children program provider orders for pediatric vaccines – United States, December 23, 2019-May 10, 2020



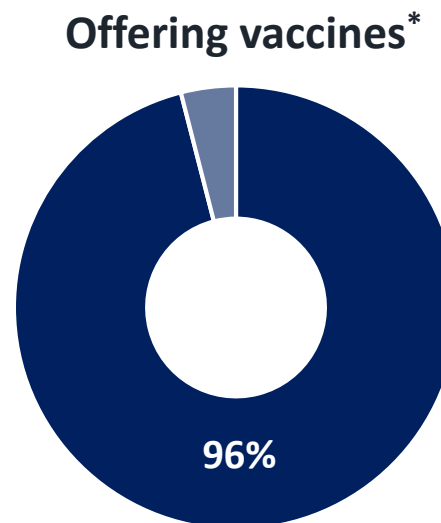
Source: CDC

What is the capacity among pediatric providers to administer vaccines?

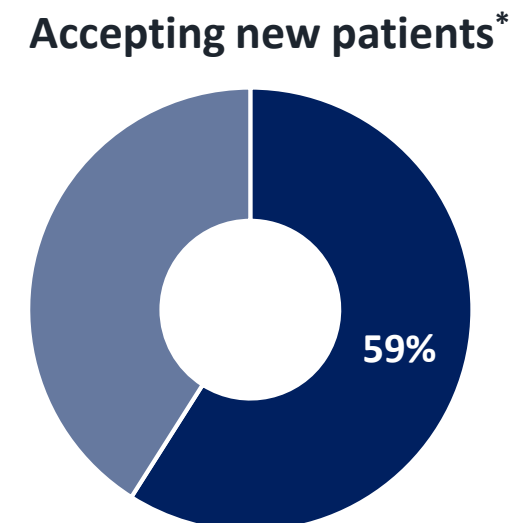
- Vaccines for Children (VFC) program: provides vaccines at no cost to eligible children; ~38,000 enrolled practices encompass ~86% of U.S. pediatricians
- Among 1,933 VFC-enrolled practices the majority are: currently open, offering vaccines, and able to accept new patients (as of May 20, 2020)



*62% have reduced hours



* Among open practices;
81% offering vaccines to all patients



*Through August 1st

Immunization infrastructure remains strong during COVID-19

Conclusions from survey of VFC providers

- As of May, 2020, immunization infrastructure sufficient to meet patient needs and ensure catch-up vaccination, though some access issues remain
- Majority of providers will be able to administer vaccines during the critical back-to-school period
- To help ensure routine childhood vaccine services get back on track, efforts needed to support providers and parents

CDC activities with immunization programs and partners to support routine childhood vaccination

- **Monitor** vaccination service delivery to inform targeted interventions
- **Support**
 - Providers through the development of guidance and support materials
 - Immunization awardees in identifying and responding to disruptions in vaccination
 - Catch-up vaccination through reminder/recall systems
 - Access to vaccines by identifying gaps in VFC provider network
 - Identification of policy interventions to support healthcare providers
- **Communicate**
 - Importance of vaccination to parents, providers, and partners
 - Information on VFC program to families
- **Plan** back-to-school vaccination activities during the summer and influenza vaccination in the fall

CDC Interim Guidance for Immunization Services During the COVID-19 Pandemic

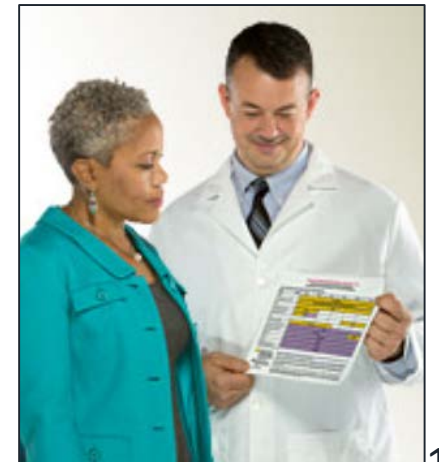
Routine immunization services remain critical

- Routine vaccination prevents illnesses that lead to increased medical visits and hospitalizations, further straining the healthcare system
- Influenza vaccination will be critical to reduce the impact of respiratory illnesses and resulting burdens on the healthcare system



Routine vaccination across the lifespan

- **Children and adolescents:** Reschedule missed well-child visits and/or vaccinations
 - Start with newborns, infants and children up to aged 24 months, young children, and extending through adolescence
- **Pregnant women:** If vaccination has been delayed, administer vaccines during the next in-person appointment
- **Adults:** Administer all recommended vaccines
 - Especially important in older adults and those with underlying conditions



Decreasing immunization rates mean it is particularly important to:

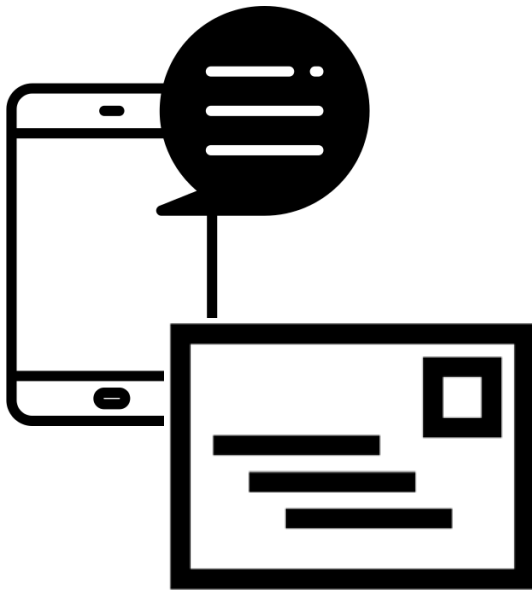
- Assess the vaccination status of all patients to avoid missed opportunities and ensure timely vaccination catch-up.
- Administer all vaccines due or overdue according to the recommended [CDC immunization schedules](https://www.cdc.gov/vaccines/imz/downloads/pdf/2020-05-14-000.pdf) during each visit.

| Child and Adolescent Immunization Schedule (birth through 18 years) | | | | | | | | | | | | | | | | |
|--|----------------------|----------------------|----------------------|----------------------|------|-------|-------|-------|----------|---------|---------|----------|-----------|-----------|--------|-----------|
| Table 1 Recommended Child and Adolescent Immunization Schedule for ages 18 years or younger, United States, 2020 | | | | | | | | | | | | | | | | |
| Vaccine | Birth | 1 mo | 2 mo | 4 mo | 6 mo | 12 mo | 15 mo | 18 mo | 19-23 mo | 2-5 yrs | 4-6 yrs | 7-10 yrs | 11-12 yrs | 13-15 yrs | 16 yrs | 17-18 yrs |
| Hepatitis B (HepB) | 1 st dose | 2 nd dose | | | | | | | | | | | | | | |
| Rotavirus (RV) (3-dose series), RSV (3-dose series) | | 1 st dose | 2 nd dose | See Notes | | | | | | | | | | | | |
| Diphtheria, tetanus, acellular pertussis (DTaP <7 yrs) | | 1 st dose | 2 nd dose | 3 rd dose | | | | | | | | | | | | |
| Human papillomavirus type 9 (HPV) | | | | | | | | | | | | | | | | |
| Pneumococcal conjugate (PCV13) | | 1 st dose | 2 nd dose | See Notes | | | | | | | | | | | | |
| Inactivated poliovirus (IPV <18 yrs) | | 1 st dose | 2 nd dose | | | | | | | | | | | | | |
| Influenza (IV) | | | | | | | | | | | | | | | | |
| Influenza (IAN) | | | | | | | | | | | | | | | | |

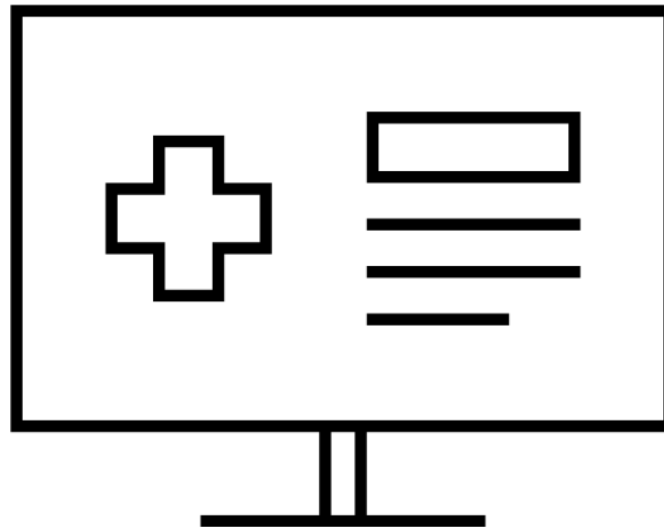
| Adult Immunization Schedule (19 years and older) | | | | |
|---|---|---|-------------|-----------|
| Table 1 Recommended Adult Immunization Schedule by Age Group, United States, 2020 | | | | |
| Vaccine | 19-26 years | 27-49 years | 50-64 years | ≥65 years |
| Influenza inactivated (IV) or Influenza recombinant (IRV) | | 1 dose annually | | |
| Influenza live, attenuated (LAIV) | | 1 dose annually | | |
| Tetanus, diphtheria, pertussis (Tdap or Td) | | 1 dose Tdap, then Td or Tdap booster every 10 years | | |
| Mumps, measles, rubella (MMR) | | 1 or 2 doses depending on indication (if born in 1957 or later) | | |
| Varicella (VAR) | | 2 doses (if born in 1980 or later) | 2 doses | |
| Zoster recombinant (RZV) (preferred) | | | | 2 doses |
| Zoster live (ZVL) | | | | 1 dose |
| Human papillomavirus (HPV) | 2 or 3 doses depending on age at initial vaccination or condition | 27 through 45 years | | |

Catch-up vaccination strategies

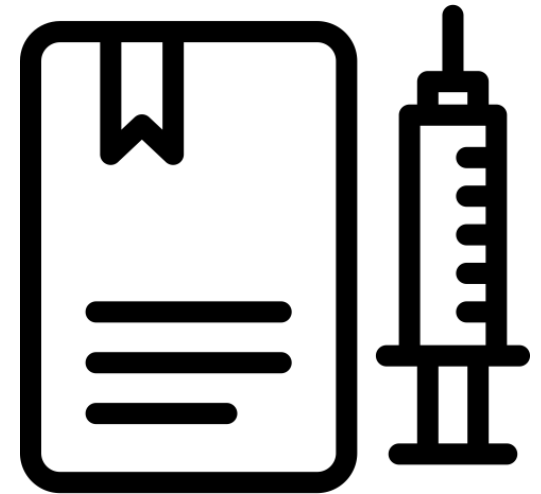
Reminder/recall systems



Forecasting through EMR or IIS



Standing orders



Vaccination administration during the COVID-19 pandemic

- Vaccination in the medical home ideal to ensure patients receive other preventive services that may have been deferred
- Regardless of vaccination location, [best practices for storage and handling of vaccines](#) and [vaccine administration](#) should be followed.
- Information on vaccines administered should be documented so that providers have accurate and timely information, and to ensure continuity of care in the setting of COVID-19 related disruptions

Vaccination of persons with confirmed or suspected COVID-19

- Routine vaccination should be deferred in persons with confirmed or suspected COVID-19, regardless of symptoms

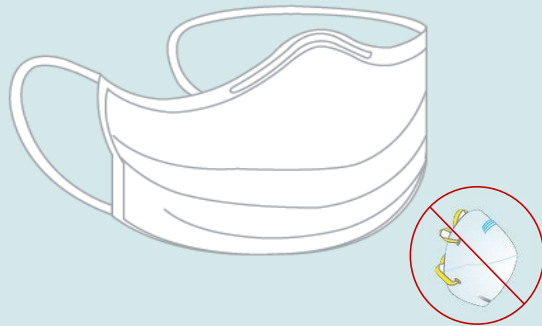


Follow CDC guidance to prevent the spread of COVID-19 in healthcare settings

- Screen patients for COVID-19 symptoms before and during visit
- Ensure physical distancing (at least 6 feet apart, where possible)
- Limit and monitor facility points of entry and install barriers to limit physical contact with patients at triage
- Implement policies for cloth face masks for persons aged ≥ 2 years (if tolerated)
- Ensure adherence to respiratory hygiene, cough etiquette, and hand hygiene
- Enhanced surface decontamination

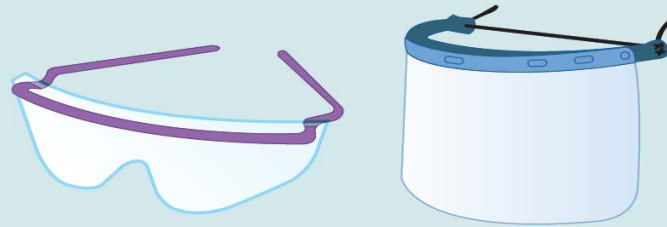
Use appropriate personal protective equipment

Face mask



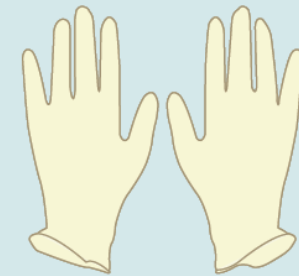
- **Recommended:** All healthcare providers (N95 masks not recommended)

Eye protection



- **Recommended:** Areas of moderate/substantial community transmission
- **Optional:** Areas of minimal/no community transmission

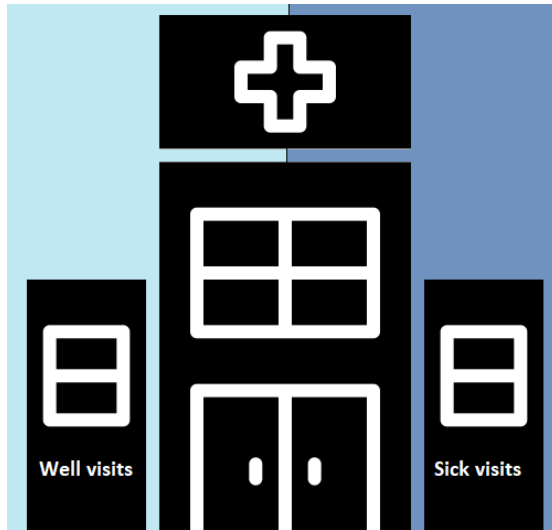
Gloves



- **Recommended:** Intranasal or oral vaccines
- **Optional:** Intramuscular or subcutaneous vaccines

Ensure physical distancing during vaccination visits

Separate sick from well patients



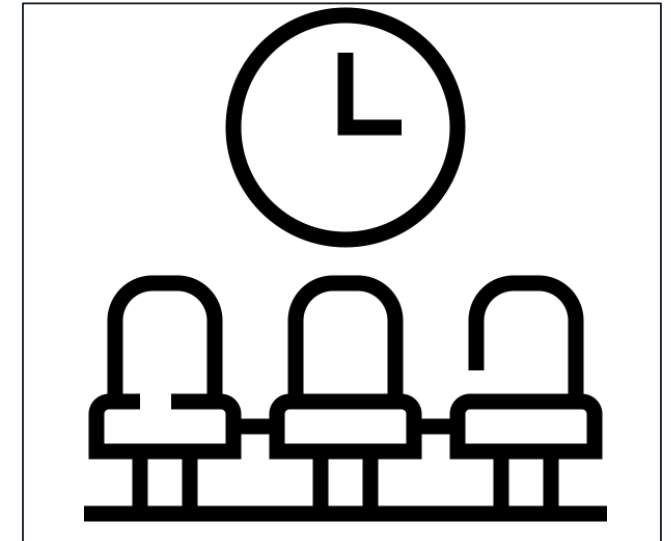
- Schedule well and sick visits at different times of the day
- Place sick visits in different areas of the facility or different locations

Ensure physical distancing measures



- At least 6 feet during all aspects of visit: check-in, checkout, screening procedures, postvaccination monitoring
- Use strategies such as physical barriers, signs, ropes, floor markings

Reduce crowding in waiting room



- Ask patients to wait outside (e.g., in their vehicles) until called in

Reassure parents through communication

- Encourage parents to return for well-child visits
- Discuss the safety protocols put in place to ensure patients can be safely vaccinated



Promote awareness of vaccines for Children (VFC) program among parents

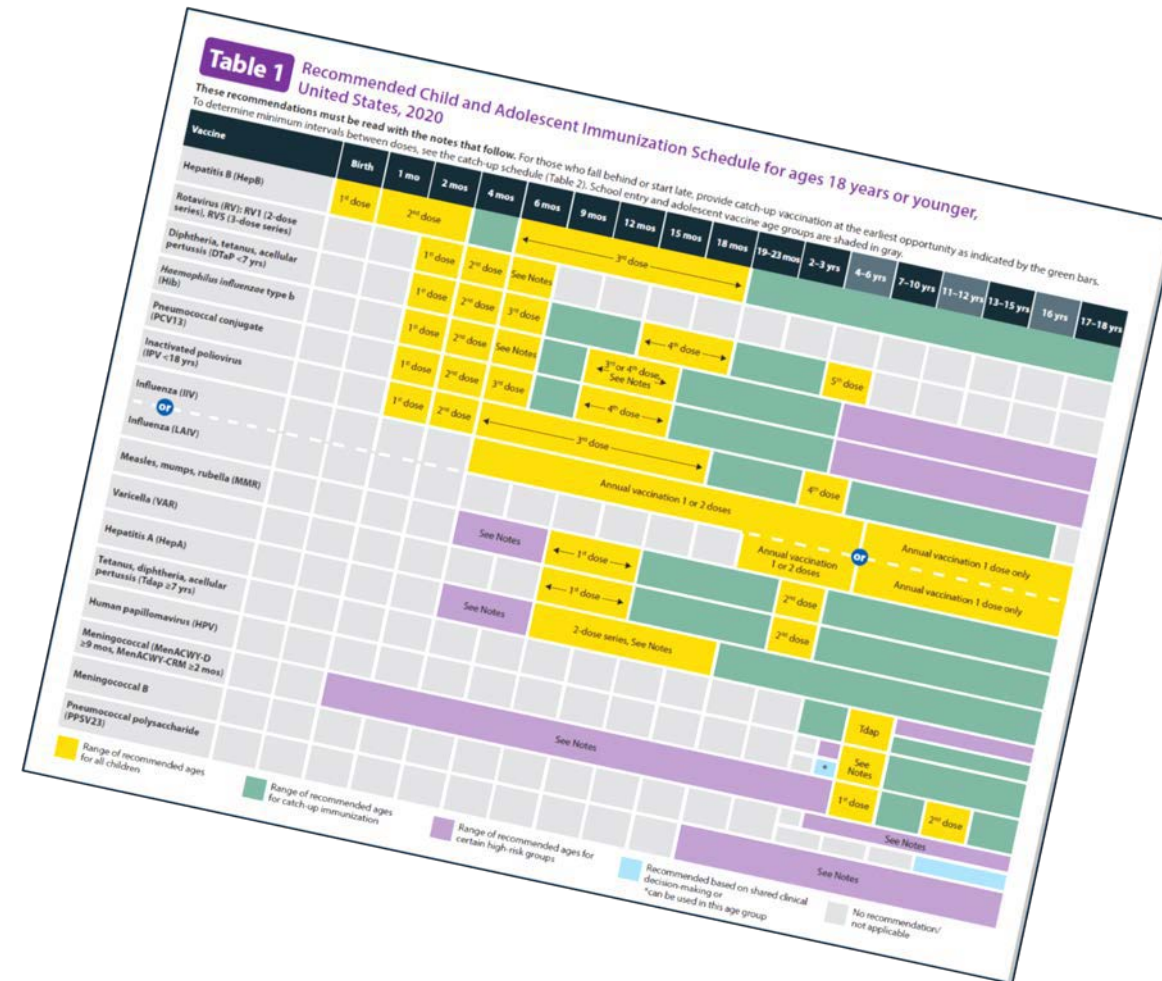
- Prior to the pandemic, ~50% of U.S. children eligible to receive free vaccines through VFC
 - More may be eligible now due to recent loss insurance
- Parents of recently-eligible children may not be aware of VFC
- Partners and providers can help improve vaccine access by increasing awareness and enrollment in VFC program



Preparing for back-to-school vaccination

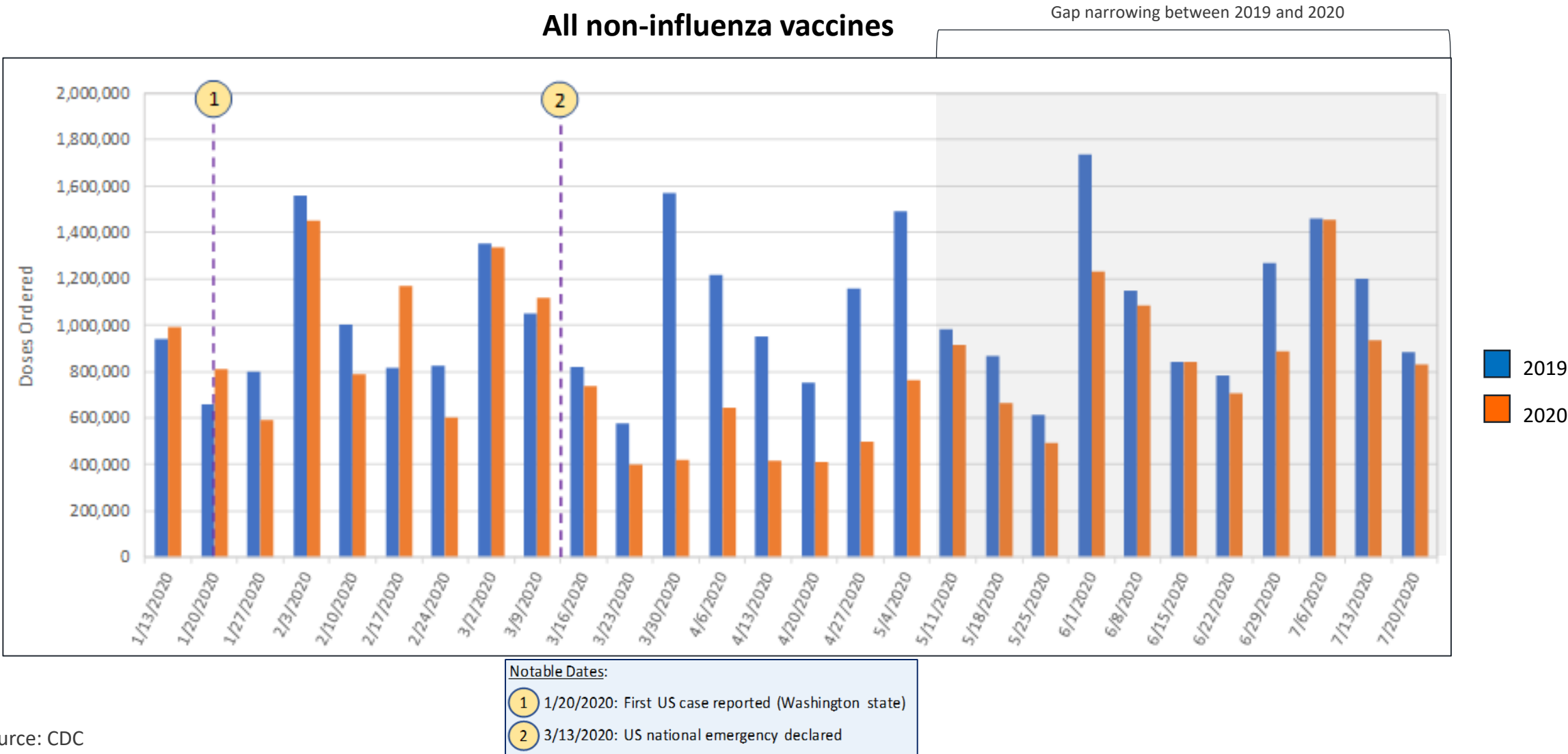
School vaccination requirements provide a critical checkpoint for children's vaccination status

- Many school-age children at risk for undervaccination and non-compliance with school vaccine requirements
- Important to augment back-to-school vaccine clinics to ensure that children have an opportunity for vaccination



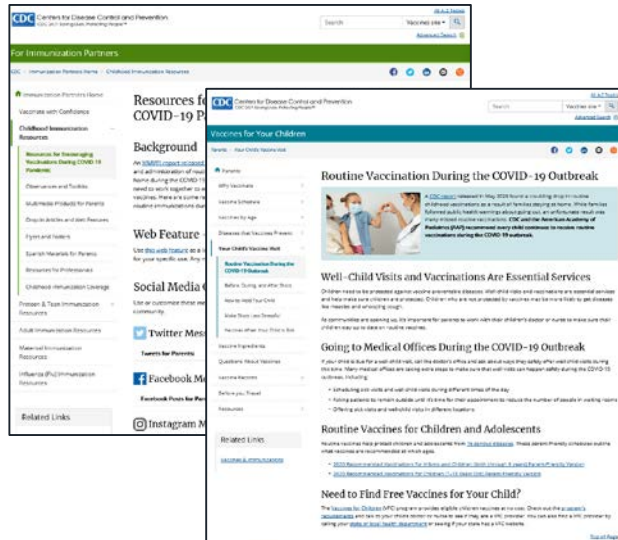
Signs of recovery in routine childhood vaccination

Weekly Vaccines for Children program provider orders for pediatric vaccines – United States, December 23, 2019-July 27, 2020



Source: CDC

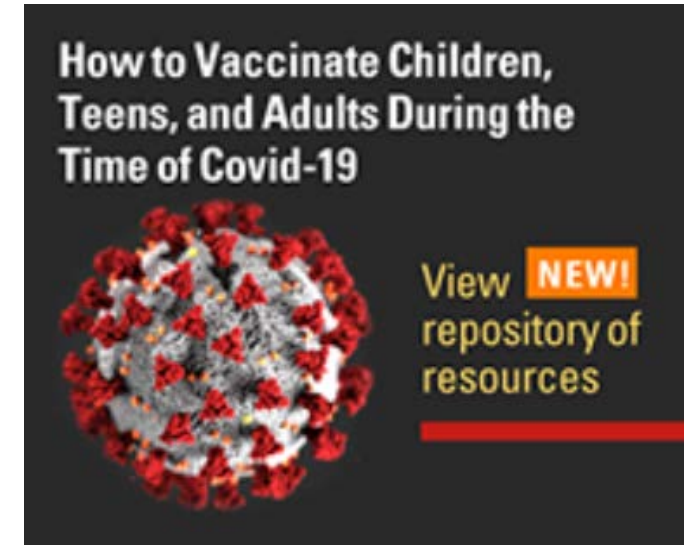
Resources for routine vaccination during the COVID-19 pandemic



CDC resources for parents
and immunization partners



AAP's #CallYourPediatrician campaign



Immunization Action Coalition Repository of Resources

<https://www.cdc.gov/vaccines/parents/visit/vaccination-during-COVID-19.html>; <https://www.cdc.gov/vaccines/partners/childhood/stayingontrack.html>
<https://www.aap.org/en-us/about-the-aap/aap-press-room/campaigns/call-your-pediatrician/Pages/default.aspx>
<https://www.immunizationcoalitions.org/resource-repository/>

Conclusions

- Substantial disruptions to routine childhood vaccination services has occurred during the COVID-19 pandemic, though signs of recovery have appeared
- Immunization programs, partners, and providers can help get childhood vaccination back on track by supporting catch-up vaccination efforts and communicating with parents about safe vaccination during the pandemic



Thank you

For more information, contact CDC
1-800-CDC-INFO (232-4636)
TTY: 1-888-232-6348 www.cdc.gov



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