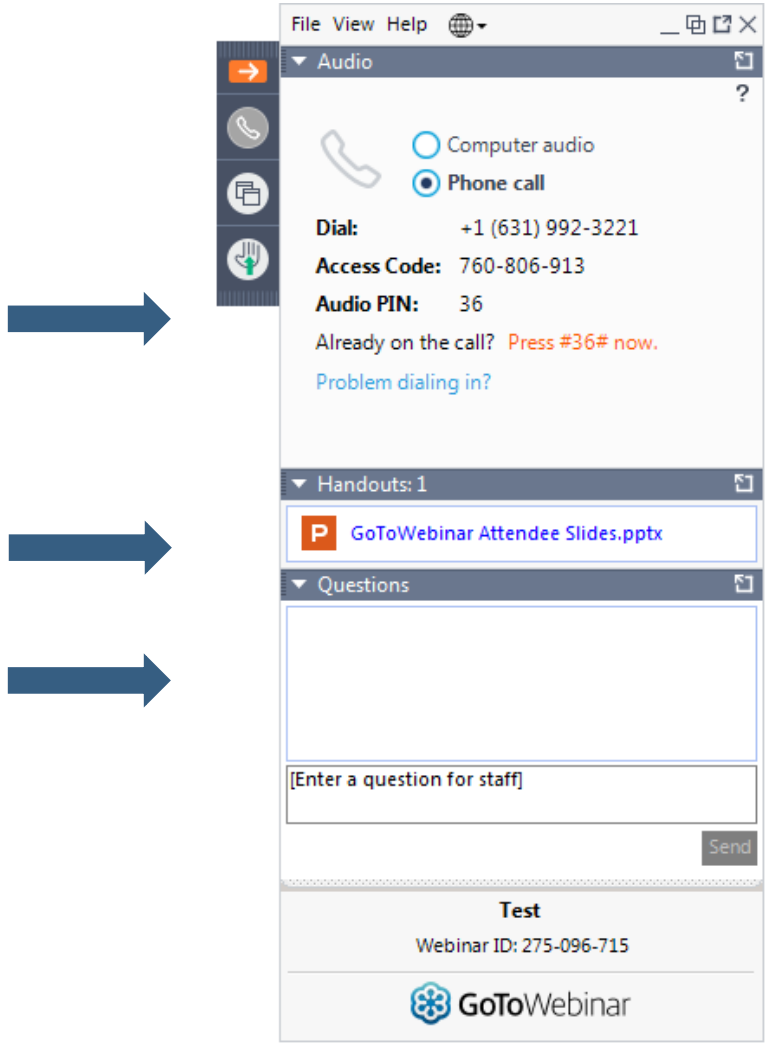
Strengthening Vaccine Confidence in Pediatric and Family Practice Offices During the COVID-19 Pandemic

August 19, 2020

Housekeeping Items

- All attendees are muted. If you are using your computer speakers, please choose the “Computer audio” option. If you are using your phone, please choose the “Phone call” option and enter your Audio PIN (found in the “Audio” panel).
- The slides are available for download in the “Handouts” section of your control panel.
- Please use the “Questions” panel to ask questions and submit comments throughout the webinar.
- This webinar is being recorded and will be archived. The archive will be made available following the webinar.



Today's Presenters

CAPT Sarah Schillie, MD, MPH, MBA
Team Lead, Education Team, Communication and Education Branch
Immunization Services Division
National Center for Immunization and Respiratory Diseases
Centers for Disease Control and Prevention

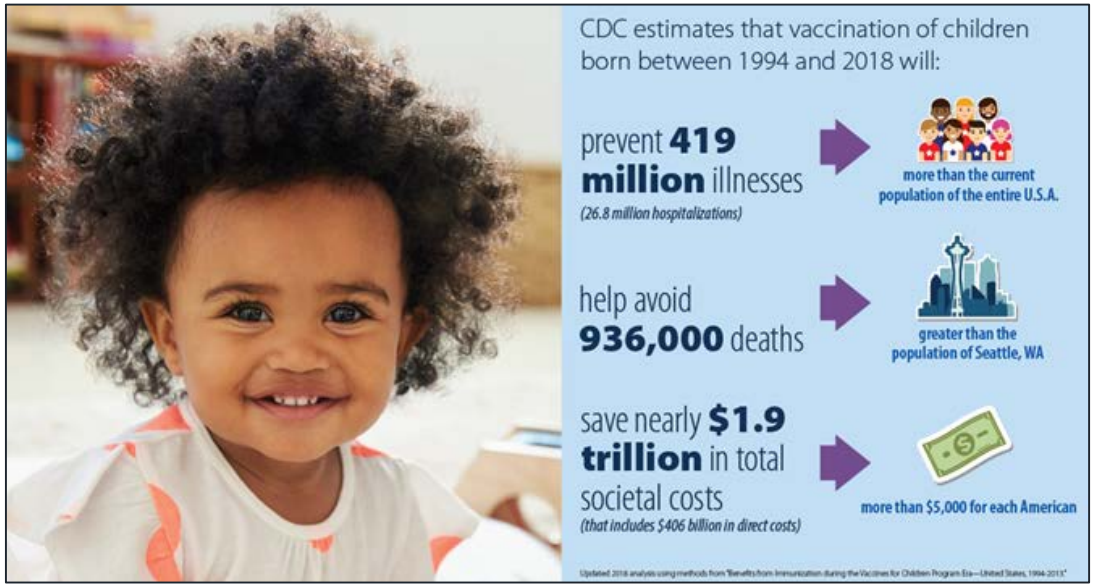
Jessica MacNeil, MPH
Deputy Executive Secretary, Advisory Committee on Immunization Practices
Immunization Services Division
National Center for Immunization and Respiratory Diseases
Centers for Disease Control and Prevention

Polls: Tell us a little about yourself!

Vaccine acceptance remains high among U.S. parents

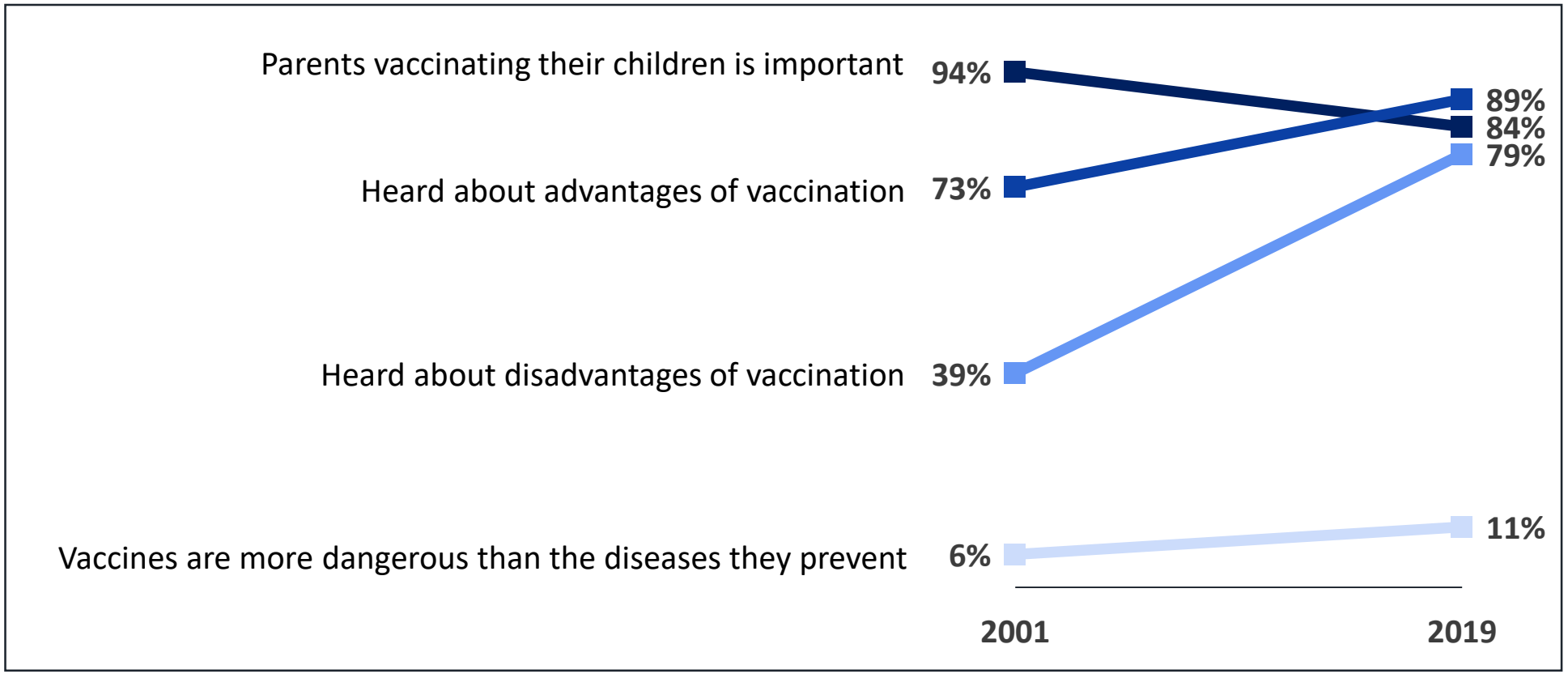
High vaccination coverage results in substantial reductions in morbidity and mortality

- Nearly **99%** of children receive any vaccines by age 2 years.
- Over **94%** of kindergartners have received state-mandated vaccines for school entry.



Hill HA, et al. *MMWR Morb Mortal Wkly Rep* 2019;68:913–918 ; Seither R, et al. *MMWR Morb Mortal Wkly Rep* 2019;68:905–912; https://www.cdc.gov/vaccines/programs/vfc/index.html

Complacency and vaccine concerns increasing

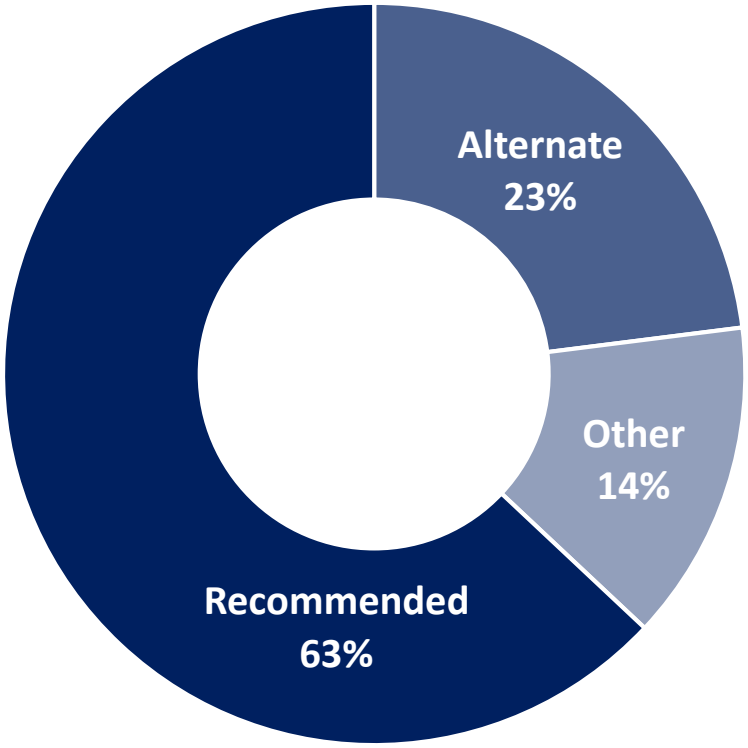


Source: Gallup, Inc. 2019

Vaccine delays or refusals a growing concern

- Nearly **one-quarter** of young children vaccinated according to an alternative schedule.

- **2.5%** of kindergartners have a vaccine exemption.
  - Rate slightly increasing over time



Vaccination schedule pattern by age 19 months

Hargreaves, AL et al. *Pediatrics* 145.3 (2020); Seither R, et al. *MMWR Morb Mortal Wkly Rep* 2019;68:905–912

Vaccine hesitancy: a continuum

- Vaccine hesitancy encompasses:
  - Delay or refusal of vaccines despite the availability of vaccination services
  - State of doubt or indecision around vaccination, even among parents who accept vaccines

MacDonald NE, et al. *Vaccine* 2015; 33(34): 4161-4; Bedford H, et. al. *Vaccine* 2018; 36(44): 6556-8.

How common is vaccine hesitancy among U.S. parents?

Routine childhood vaccines

6%

Influenza vaccine

26%

Kempe, Allison, et al. *Pediatrics* (2020).

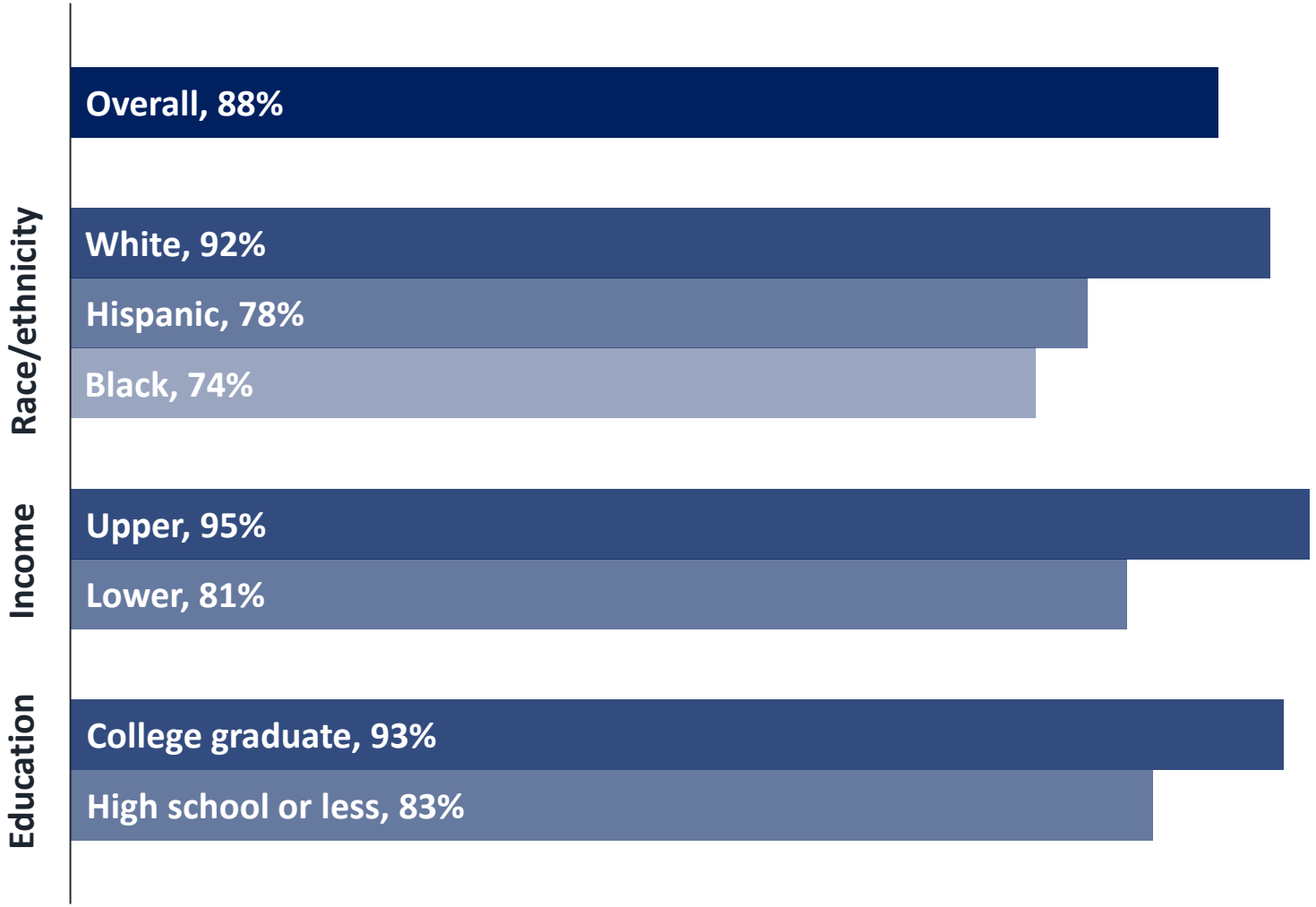
Why are some parents hesitant to vaccinate?

Questions, concerns, and perceptions about vaccines from some U.S. parents

CDC National Poll of Parents (2016); Hough-Telford C, et al. *Pediatrics* 2016; 138(3). Salmon DA, et al. *Arch Pediatr Adolesc Med* 2005; 159(5): 470-6. Siddiqui M, et al. *Hum Vaccin Immunother* 2013; 9(12): 2643-8.

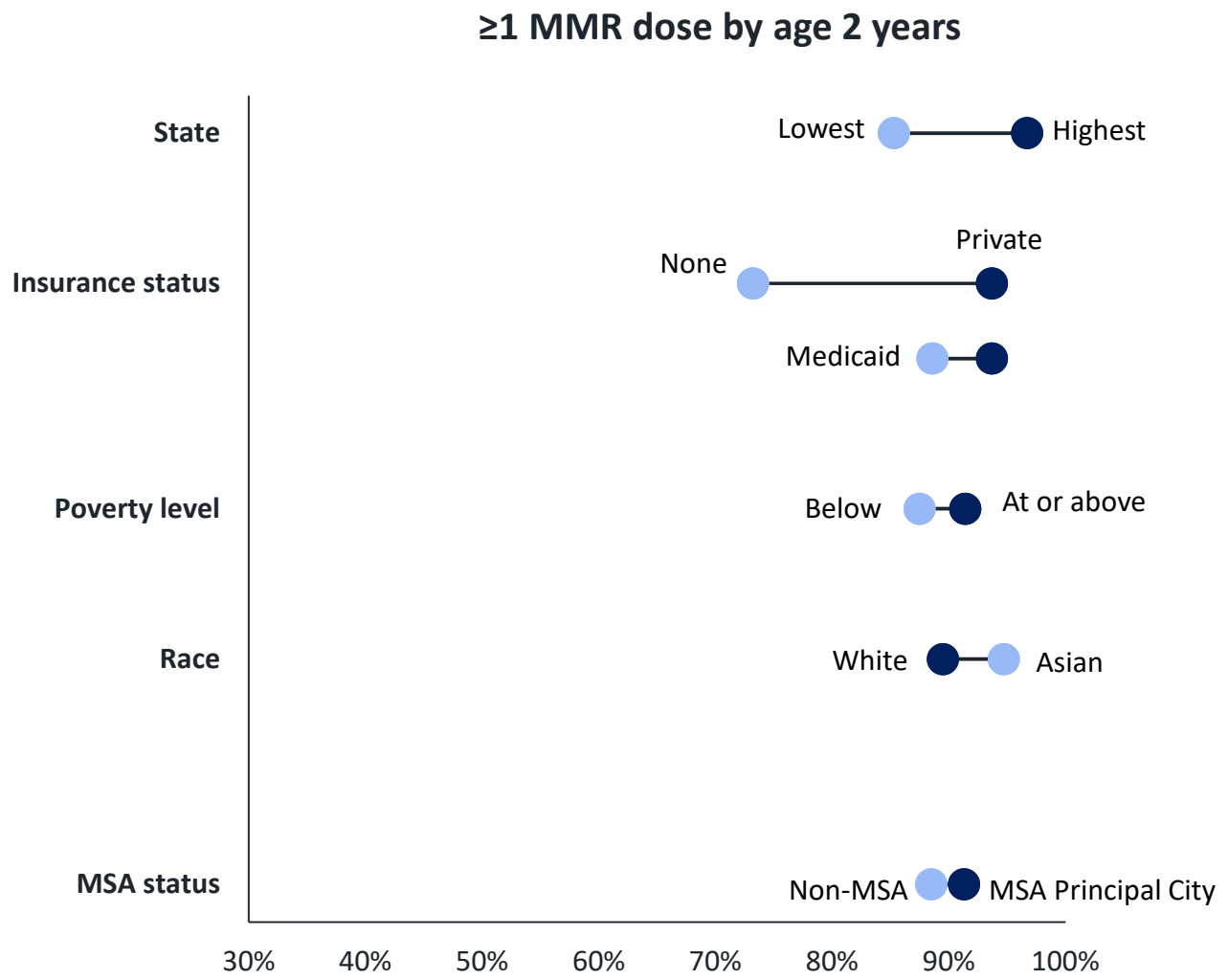
Vaccine skepticism higher in certain groups

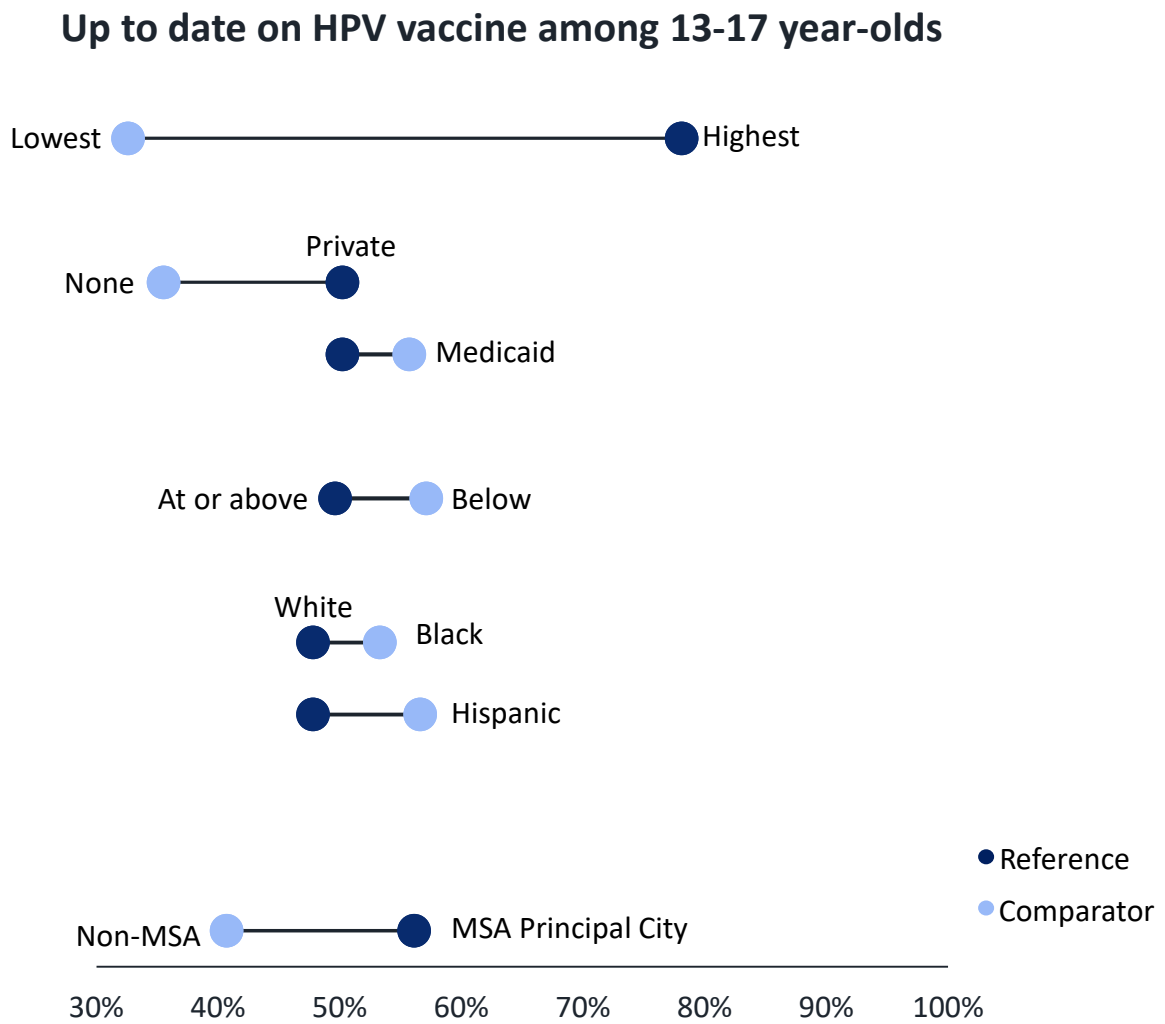
U.S. adults who say the benefits of MMR outweigh risks



Pew Research Center, 2019 (collected October 2019). Income bracket: Refers to adjusted family income level

Vaccine access issues and disparities persist



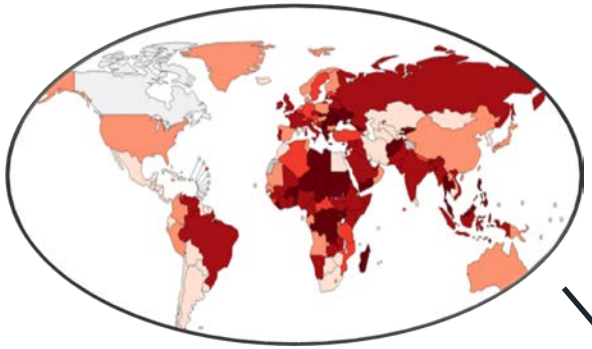


MMR: Measles, mumps, rubella vaccine; HPV: human papillomavirus vaccine; MSA: Metropolitan statistical area

Hill HA, et al. *MMWR Morb Mortal Wkly Rep* 2019;68:913–918; Walker TY, et al. *MMWR Morb Mortal Wkly Rep* 2019;68:718–723.

High coverage needed in all communities to protect against vaccine-preventable diseases

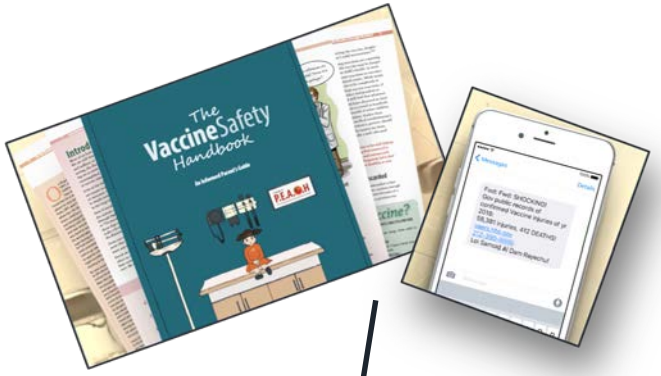
Lessons from the 2018-2019 measles outbreak in New York

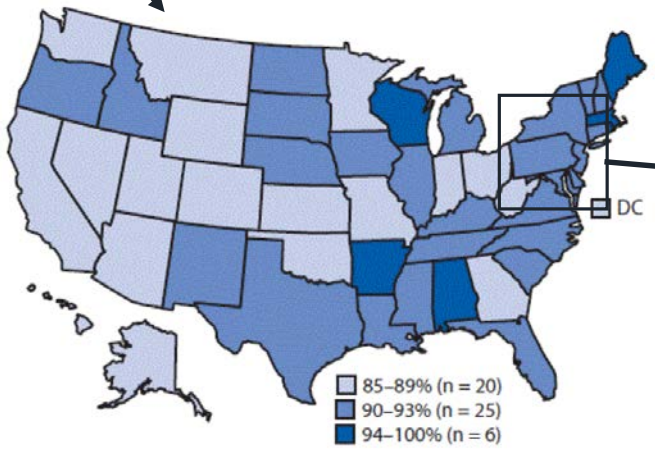


Global resurgence of measles

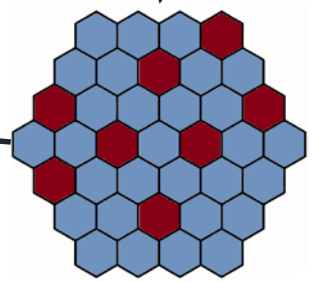
Importations of measles to U.S.

Vaccine misinformation

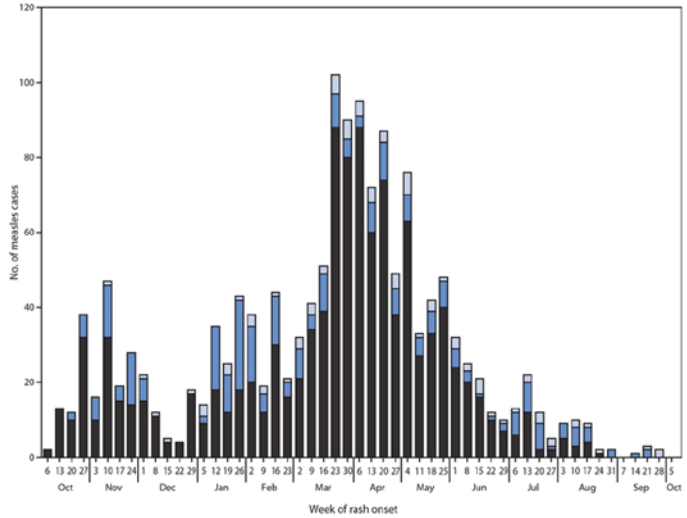




Geographic disparities in measles coverage



Pockets of undervaccination



Largest measles outbreak in nearly 30 years

Hill HA, et al. *MMWR Morb Mortal Wkly Rep* 2019;68:913–918; Patel M, et al. *MMWR Morb Mortal Wkly Rep* 2019;68; 893.

Strengthening vaccine confidence and acceptance

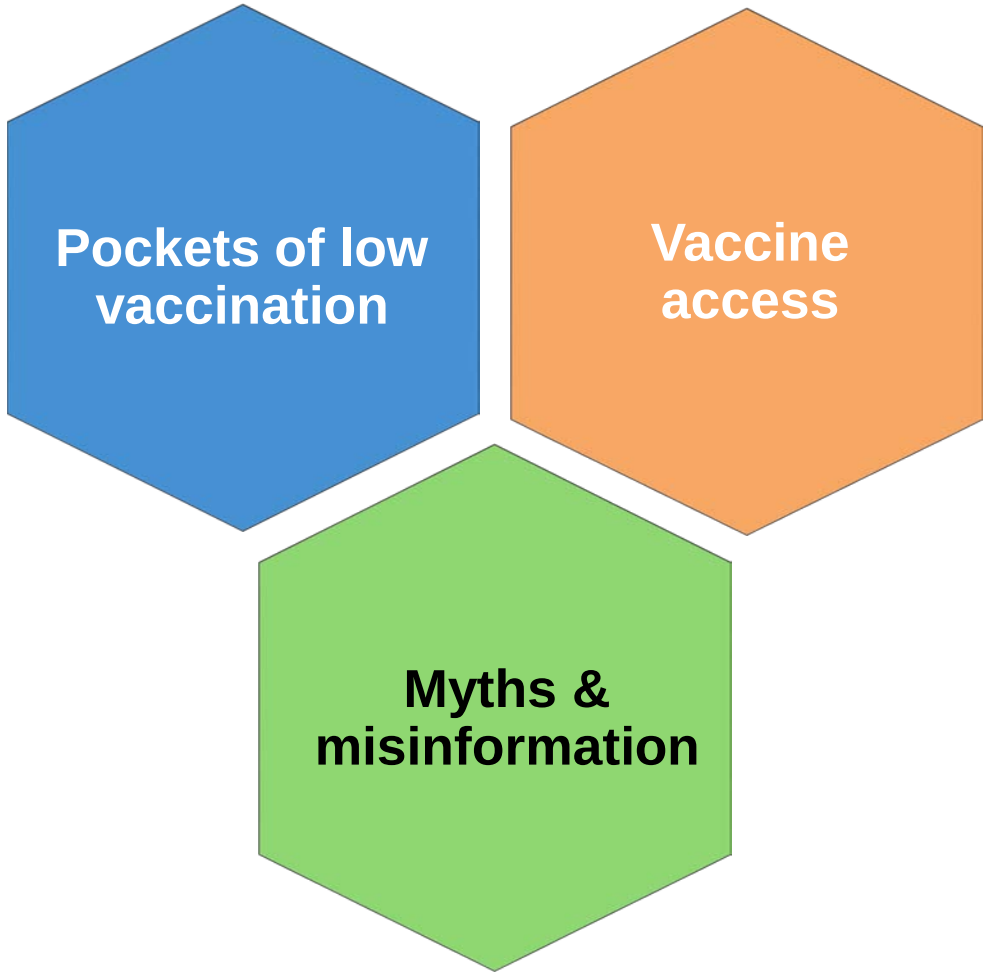
Where do we go from here?

Vaccinate with Confidence

Protect communities. Empower families. Stop myths.

Vaccinate with Confidence is CDC's strategic framework for strengthening vaccine confidence and preventing outbreaks of vaccine-preventable diseases in the United States

Responding to dynamics shared by recent outbreaks



Vaccinate with Confidence

Protect communities. Empower families. Stop myths.

Protect communities

Use every tool available to find and protect communities at risk using tailored, targeted approaches.

Empower families

Ensure parents are confident in decision to vaccinate by strengthening provider-parent vaccine conversations.

Stop myths

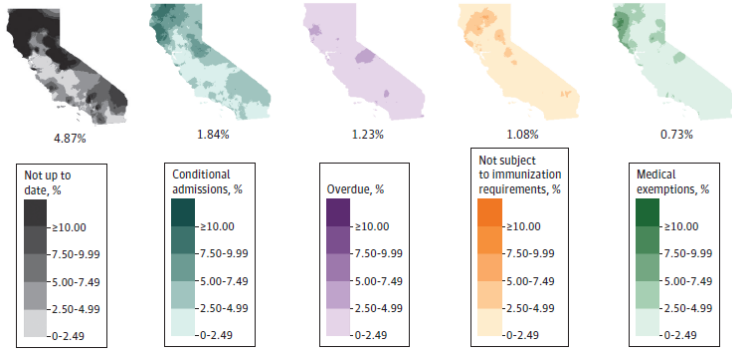
Use local partners and trusted messengers, establish new partnerships to contain the spread of misinformation, and educate critical stakeholders about vaccines.

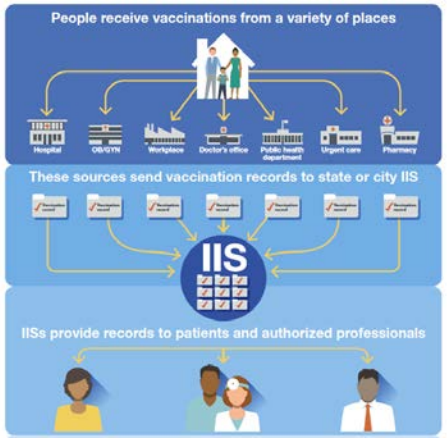
Protect communities

Strategy: Protect communities at risk from under-vaccination.

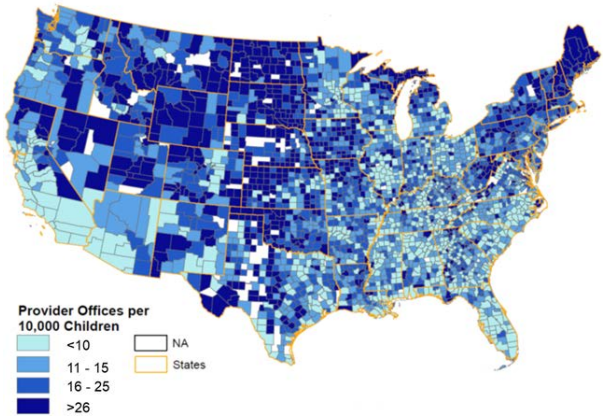
- ✓ Leverage immunization data to find and respond to communities at risk.
- ✓ Work with trusted local partners to reach at-risk communities before outbreaks.
- ✓ Ensure vaccines are available, affordable, and easy to get in every community.

Find pockets of under-vaccination





Strengthen IIS and other systems for assessing coverage



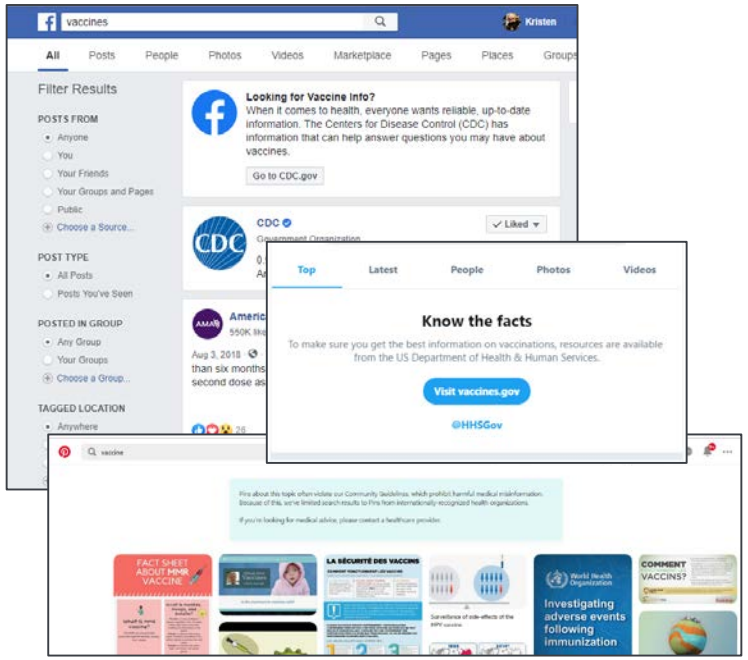
Improve access to VFC for eligible children

Pingali SC, et al. *JAMA.* 2019. 322(1): 49-56; CDC

Stop myths

Strategy: Stop misinformation from eroding public trust in vaccines.

- ✓ Work with local partners and trusted messengers to improve confidence in vaccines among key, at-risk groups.
- ✓ Establish partnerships to contain the spread of misinformation.
- ✓ Educate key new stakeholders (e.g., state policy makers) about vaccines.

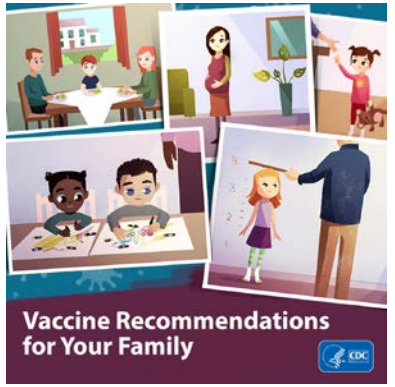


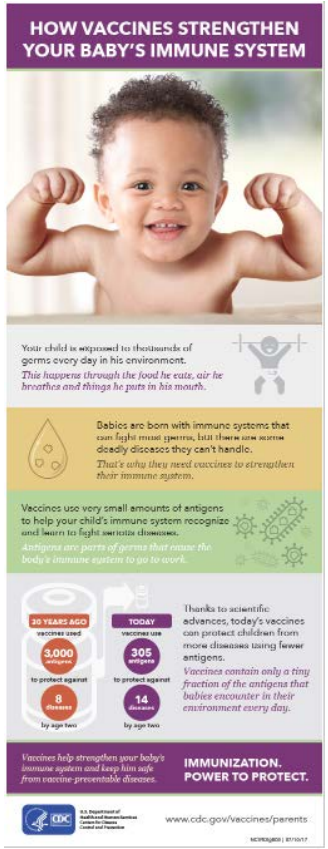
Social media companies: putting checks on vaccine misinformation

Empower families

Strategy: Get providers and parents effective information resources.

- ✓ Expand resources for healthcare professionals to help them have effective vaccine conversations with parents.
- ✓ Work with partners to start conversations before the first vaccine appointment.
- ✓ Help providers foster a culture of immunization in their practices.





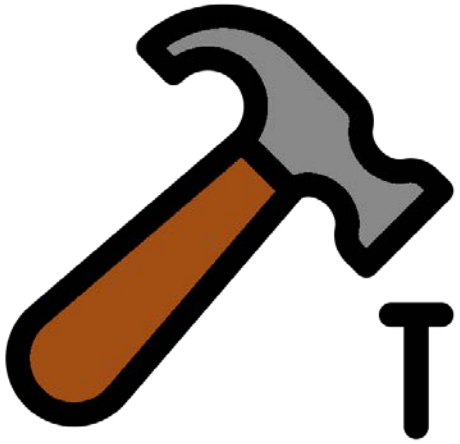
Source and image credits: CDC

Making the vaccine decision

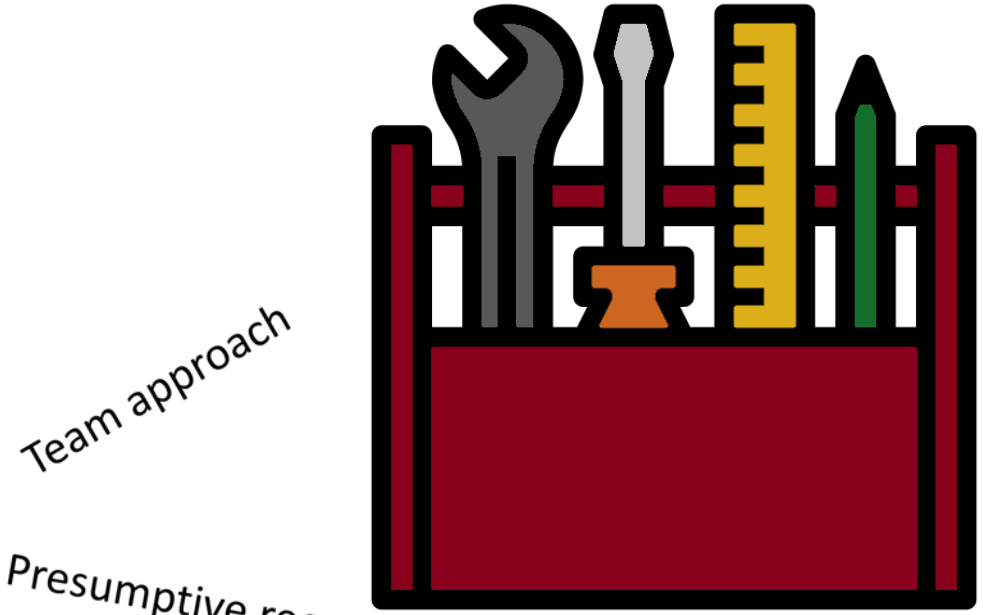
How pediatric providers can empower families and create a culture of immunization in their practices

What works in vaccine communication?

No single, effective strategy



Toolbox approach



Using a whole-team approach to vaccine communication

- **All** staff play a role in vaccine communication.
- Healthcare providers who feel confident in vaccines are more likely to recommend them to patients.
- Ensure staff has access to:
  - Up-to-date information on vaccine recommendations
  - Access to clinical resources and trainings on vaccination
  - Answers to their own questions about vaccines

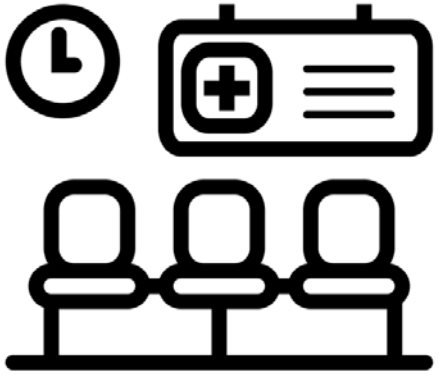
Paterson P, et al. *Vaccine* 2016; 34(52): 6700-6. Image credit: CDC

Consistent messages on the importance of vaccines throughout the visit and beyond

Check-in

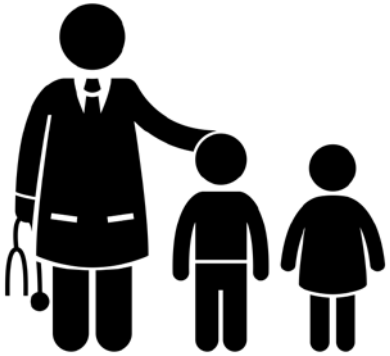
- Remind parents that vaccines are due
- Vaccine Information Statements (VISs)
- Vaccine info in new patient packet

Waiting room



- Patient materials and flyers

Exam room



- Strong vaccine recommendation
- Answering parents' questions
- Tailored educational materials

Check-out

- Schedule next vaccine appointment

Between visits

- Reminder/recall

Image credit: Noun project

Trust is the foundation for vaccine conversations

- **93%** of parents say their child's provider is most trusted source of vaccine information
- Trust in the provider shown to positively or negatively affect vaccine acceptance
- Building trust **early** is important.
  - Satisfaction in parents of young infants associated with improved vaccine uptake

What makes for a trusted provider?

CDC National Poll of Parents (2018); Salmon DA, et. al. *Arch Pediatr Adolesc Med* 2005; 159(5): 470-6; Benin AL, et. al. *Pediatrics* 2006; 117(5): 1532-41; Glanz JM, et. al. *Acad Pediatr* 2013; 13(5): 481-8; Larson HJ, et. al. *Hum Vaccin Immunother* 2018; 14(7): 1599-609; Fiscella K, et. al. *Med Care* 2004; 42(11): 1049-55; Thom DH, et. al. *J Fam Pract* 2001; 50(4): 323-8; Schempf AH, et. al. *Arch Pediatr Adolesc Med* 2007; 161(1): 50-6.

Start conversations early

Use every opportunity to reach parents before the first vaccine visit

Prenatal pediatric visits

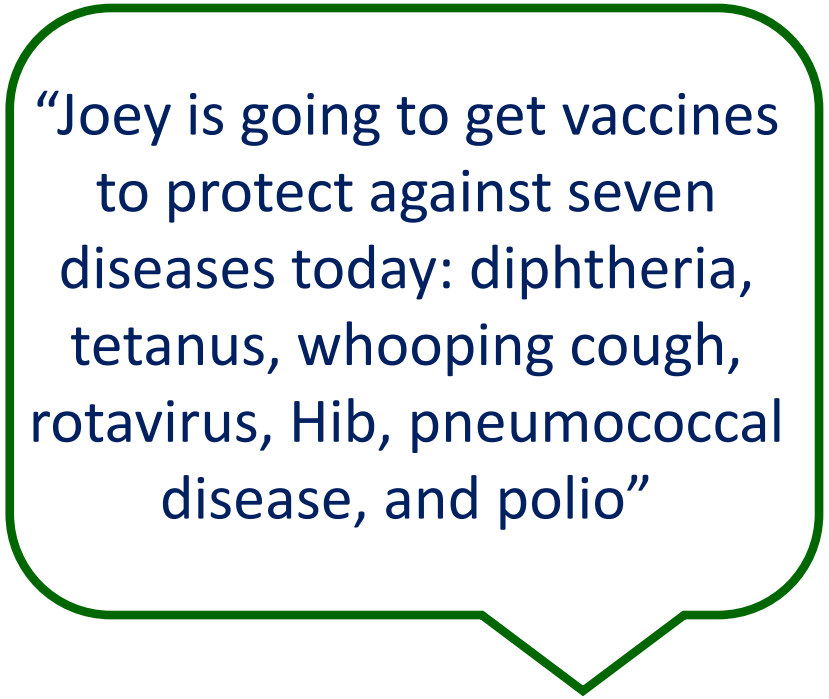
Newborn nursery rounds

Practice website and new patient packet

- Most mothers make vaccine decisions for their child before or during pregnancy.
  - Parents who refuse vaccines more likely to start thinking about them before child's birth
- Expectant mothers want more information on vaccines from a pediatric provider.
  - With limited opportunities, frequently turn to the internet, media, or word of mouth

Glanz JM, et. al. *Acad Pediatr* 2013; 13(5): 481-8; Corben P, et. al. *BMC Public Health* 2018; 18(1): 566. Danchin MH, et. al. *Vaccine* 2018; 36(44): 6473-9. Weiner JL, et. al. *Am J Prev Med* 2015; 49(6 Suppl 4): S426-34. Wroe AL, et. al. *Health Psychol* 2004; 23(1): 33-41; Rosso A, et. al. *Hum Vaccin Immunother* 2020: 1-12. Vannice KS, et. al. *Pediatrics* 2011; 127 Suppl 1: S120-6.

Initiating the conversation: Give a strong recommendation using a presumptive approach



Presumptive approach

Participatory approach

Why use the presumptive approach?

- **3- to 5-fold** more effective than participatory approach, even after adjusting for baseline parental hesitancy

- Among parents who resist after a presumptive recommendation, approximately **half** accept vaccines when the provider pursues their initial recommendation.

- Presumptive approach associated with greater parental perceived urgency for vaccination and trust in the information received from the provider

Dempsey AF, et. al. *Vaccine* 2019; 37(10): 1307-12; Hofstetter AM, et. al. *Vaccine* 2017; 35(20): 2709-15; Opel DJ, et al. *Pediatrics* 2013; 132(6): 1037-46; Opel DJ, et al. *Am J Public Health* 2015; 105(10): 1998-2004; Sturm L, et. al. *J Adolesc Health* 2017; 61(2): 246-51.

What if parents have questions?

- Even parents who accept vaccines often have questions or concerns and are simply looking for additional information or reassurance.

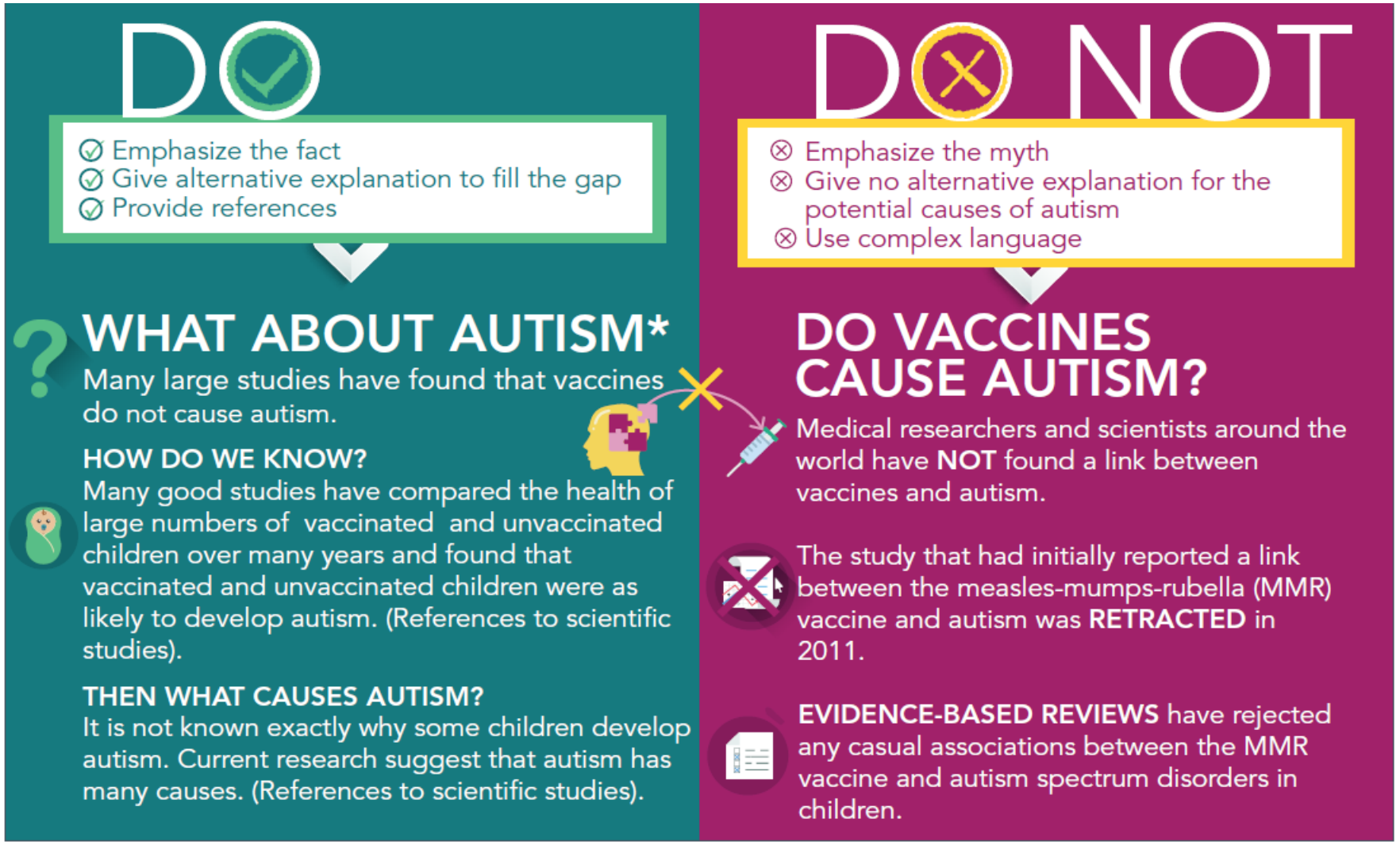
- When responding to parents' questions or concerns, share:
  - Personal stories
  - Balanced information on risks and benefits
  - Vaccination as the social norm

- Share educational materials tailored to their questions.

"My aunt had cervical cancer. That's why I made sure my own teenagers received the HPV vaccine."

Kennedy A, et. al. *Health Aff* (Millwood) 2011; 30(6): 1151-9; Gust DA, et. al. *Pediatrics* 2008; 122(4): 718-25; Shelby A, et. al. *Hum Vaccin Immunother* 2013; 9(8): 1795-801; Kempe A, et. al. *Am J Prev Med* 2011; 40(5): 548-55; Betsch C, et. al. *Health Psychol* 2013; 32(2): 146-55. Image credit: CDC

Addressing vaccine myths



Dube E, et. al. *Can Commun Dis Rep* 2020;46(2/3):48–52.

Avoid common communication traps

Persuasion trap

Data dump trap

Q and A trap

Use motivational interviewing techniques

- Patient-centered, guiding communication style for enhancing a person's own motivation for change or behavioral action

- Through use of motivational interviewing, the provider can:
  - Express understanding of parents' knowledge and beliefs.
  - Elicit discrepancies between current situation and what the parent desires.
  - Allow the parent to express their own views.
  - Support parents' confidence in their ability to change.

- Use of motivational interviewing for vaccine communication demonstrated to increase vaccine uptake by **7-10%**

Gagneur A, et. al. *Vaccine* 2018; 36(44): 6553-5. Reno JE, et. al. *J Health Commun* 2018; 23(4): 313-20; Dempsey AF, et. al. *JAMA Pediatr* 2018; 172(5): e180016; Gagneur A, et. al. *Euro Surveill* 2019; 24(36). Gagneur A, et. al. *BMC Public Health* 2018; 18(1): 811.

Health professional:	Good morning Mrs Wilkinson. I understand you have brought Robbie for his first infant vaccinations today.
Mother:	That's right.
Health professional:	OK, have you read the leaflet about the injections? What questions are on your mind? (*build rapport, seek questions and concerns*)
Mother:	Well, I'm pretty nervous – he seems so young.
Health professional:	You sound quite worried (*empathic response*) let's talk it through together, tell me what you are concerned about? (*further building rapport and eliciting concerns*)
Mother:	One of the mums in my mothers' group said that one of the injections has got five ingredients and that's too many for their immune systems to cope with. He does seem so young to be having injections against all these diseases at once. Won't it make him ill?
Health professional:	OK, we can talk about this (*guiding*) but do you have other worries as well? (*eliciting further concerns*)
Mother:	Well I read also that they can get a sore leg afterwards, so that's another worry.
Health professional:	(*pausing to allow mother to interject if she has questions and to observe body language*) Right, let's talk about the five ingredients and then we can talk about the chances of getting a sore leg (*signposting and structuring of explanation*). You're right that the injection has got five ingredients which would protect Robbie from the diseases called diphtheria, tetanus, whooping cough, polio and *Haemophilus influenzae* b (Hib). It seems a lot doesn't it (*empathic response*). Children, even newborn babies, have to deal with enormous amounts of bacteria and other foreign material every day, and the immune system responds to each of these in various ways to protect the body. Babies' immune systems can handle this, and the vaccines these days are so refined that babies can easily cope with several vaccines in one go. (*chunk of information provided followed by pause for mother to raise further questions and health professional to observe mother's body language*).
Mother:	OK, and will he get a sore leg?
Health professional:	Most children don't have any reaction at all, other than having a cry with the injection, and even then they generally settle really quickly with a cuddle and some comforting words from mum (*empowering*). It's true that a small number of children, about 10%, or 1 in 10, can get a redness or a sore area where the needle goes in (*acknowledging*) – but these reactions don't usually distress the child, and only last a couple of days, then go away. So what I ask mothers to do is to watch their child and if they are concerned bring them back to the clinic so we can check them over. How does that sound? (*avoid being overly persuasive, positive framing of risk*)
Mother:	Is there anything in particular I should watch for?
Health professional:	Robbie may be a bit unsettled for a day or so after his injection but he shouldn't be ill with it. The leaflet tells you about what to look out for and what to do if you are concerned.
Mother:	Thanks – I'm still a bit nervous but I think we should get it done.

Motivational interviewing

- Empathy
- Collaboration
- Evocation
- Support for autonomy

Leask J, et. al. *BMC pediatrics* 12.1 (2012): 154.

Additional considerations for influenza vaccine

Rethinking influenza vaccine messaging

Why are parents hesitant?

- Perceived low vaccine effectiveness
- Safety concerns
- Perception that influenza vaccine can cause influenza

Communication strategies for flu vaccine

- Focus on burden of influenza in children
- Rebrand influenza as a “routine” vaccine
  - Use the presumptive approach
- Reassure parents of flu vaccine safety
  - Over 170 million doses given annually
- Discuss efficacy of influenza vaccine in preventing severe disease

De St. Maurice A, et. al. *Pediatrics*, 2020.

When a parent refuses vaccines

- Refusal during a visit does not necessarily mean the parent will continue to decline vaccines in the future.

- Maintain rapport with parent to leave the door open to future discussions.

- Before the patient leaves the office, create at least one action item, such as:
  - Scheduling the next visit
  - Providing tailored information to address the parent's questions

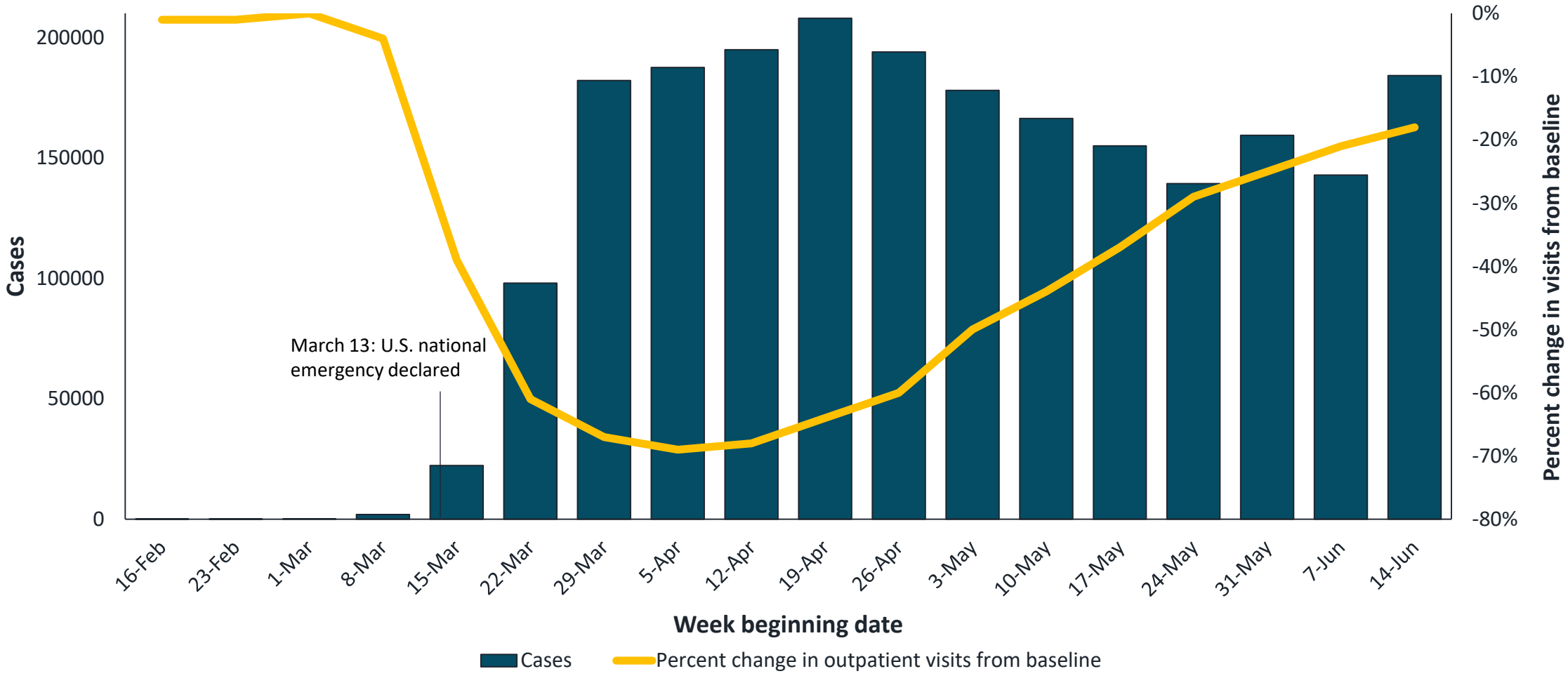
Image credit: CDC

Strengthening vaccine confidence and acceptance

More important than ever

Substantial disruptions to outpatient medical care during COVID-19 pandemic

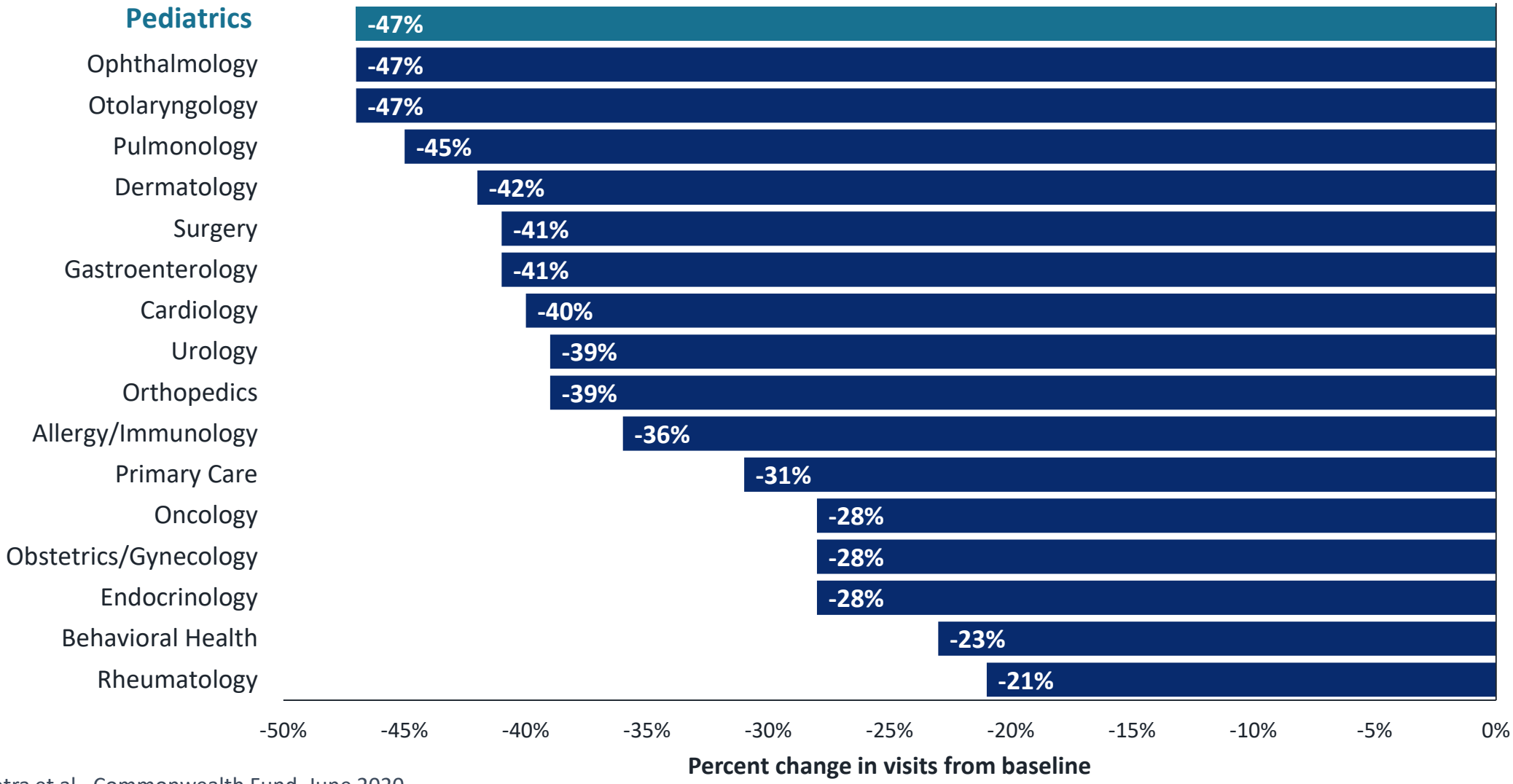
As number of COVID-19 cases increased and stay-at-home orders implemented, nearly 70% reduction in outpatient in-person visits before starting to rebound



https://www.cdc.gov/coronavirus/2019-ncov/cases-updates/cases-in-us.html; Ateev Mehrotra et al., Commonwealth Fund, June 2020.

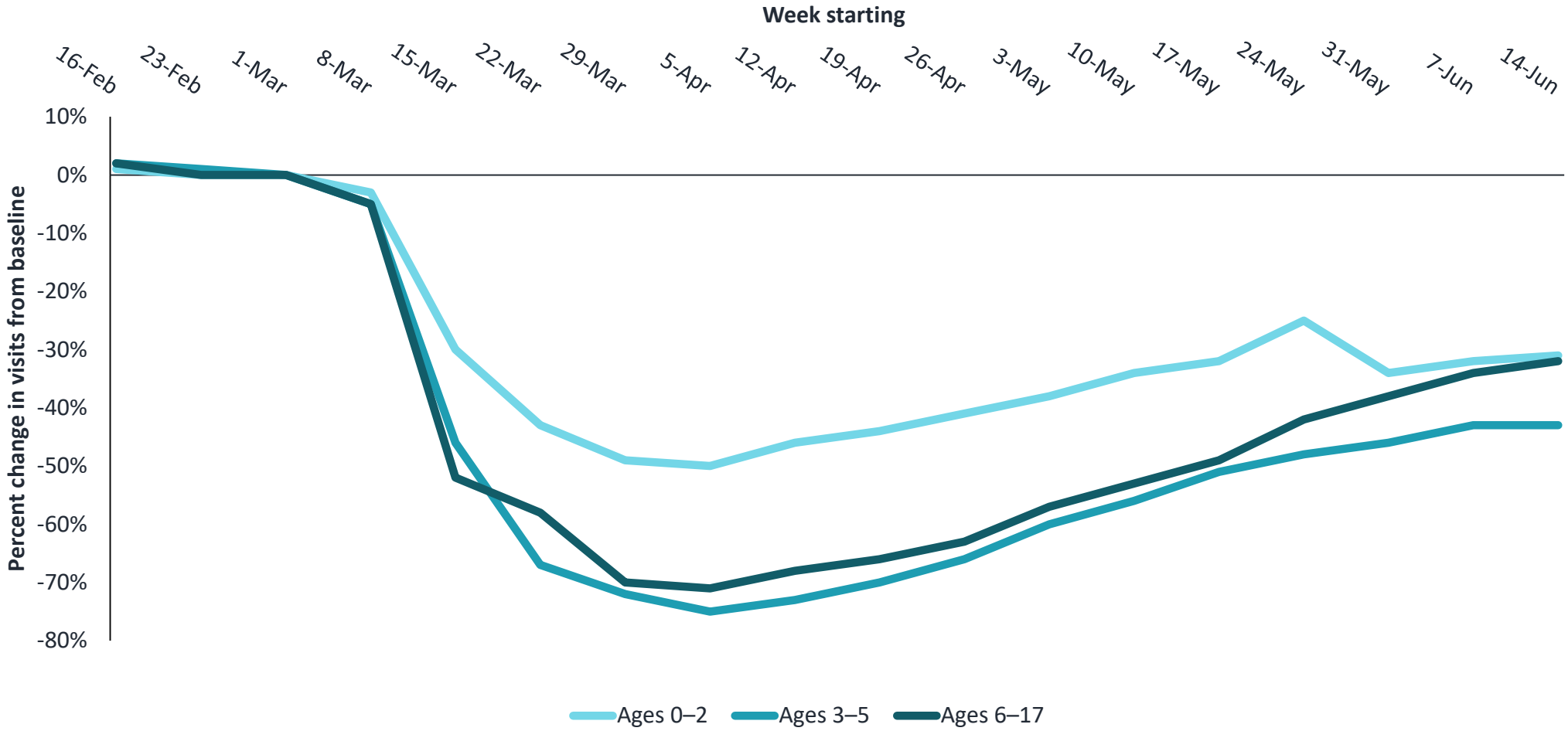
Pediatrics among the hardest-hit specialties

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



Ateev Mehrotra et al., Commonwealth Fund, June 2020.

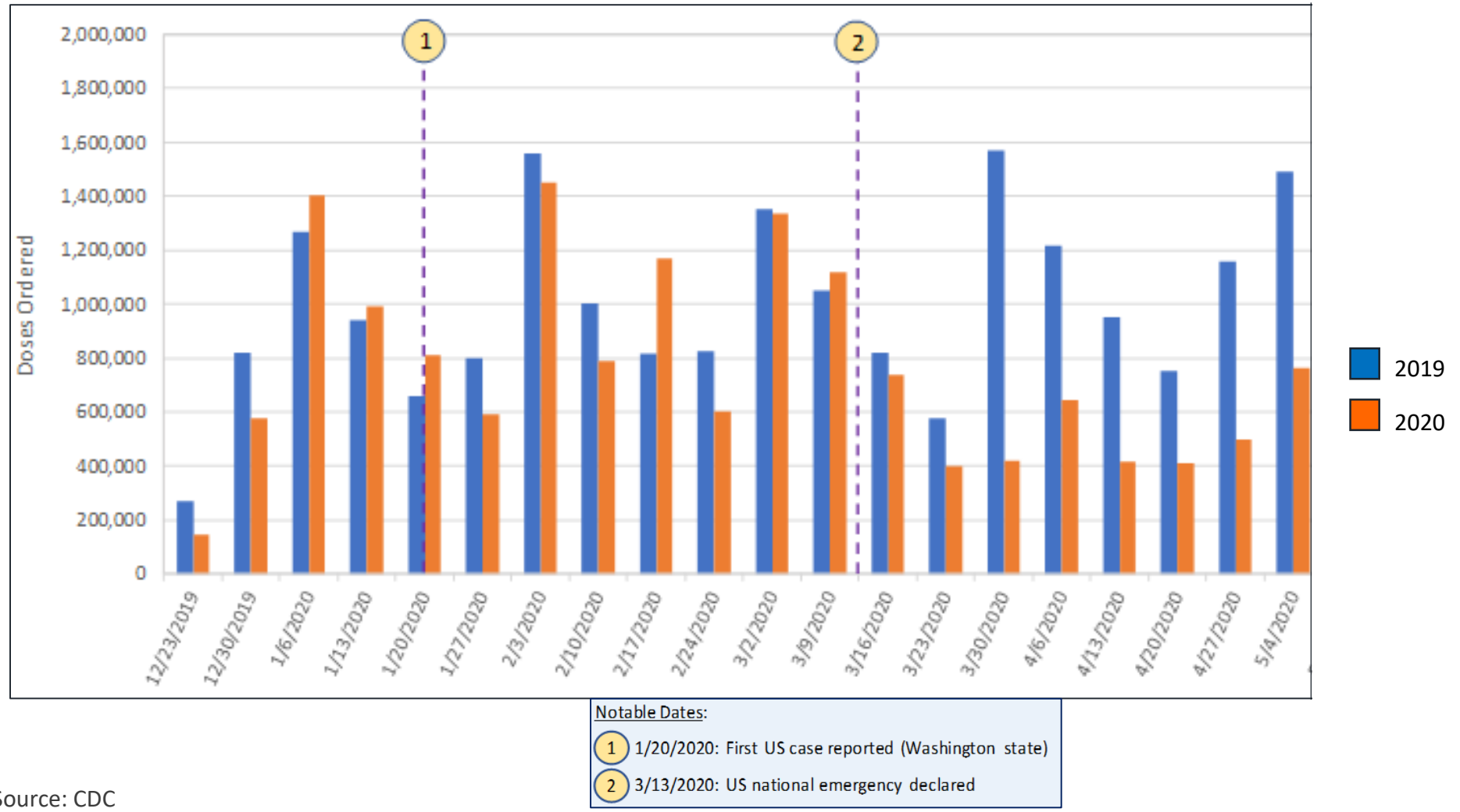
Disruptions in outpatient medical care among all pediatric age groups during COVID-19 pandemic



Ateev Mehrotra et al., Commonwealth Fund, June 2020.

COVID-19 pandemic and disruptions to routine childhood vaccination

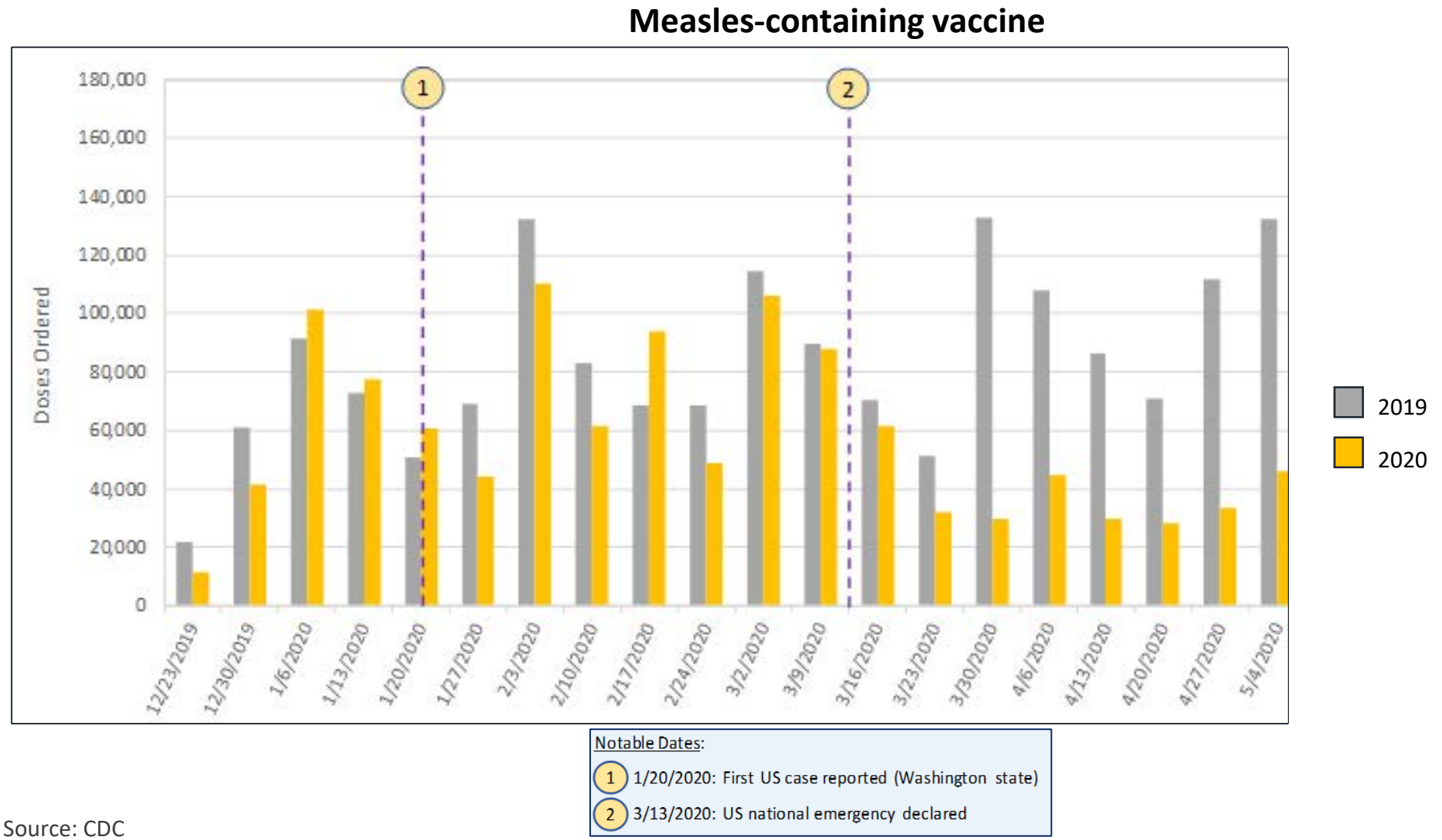
Weekly decreases in Vaccines for Children program provider orders for pediatric vaccines – United States, December 23, 2019-May 10, 2020



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



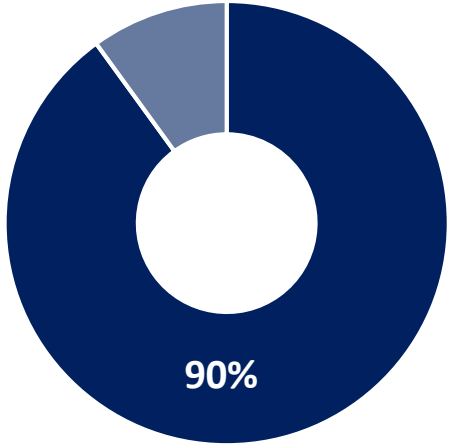
Source: CDC

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

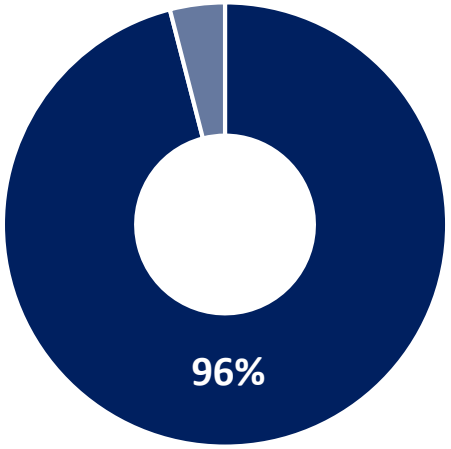
- Among 1,933 VFC-enrolled practices, the majority are currently open, offering vaccines, and able to accept new patients (as of May 20, 2020),

Open*



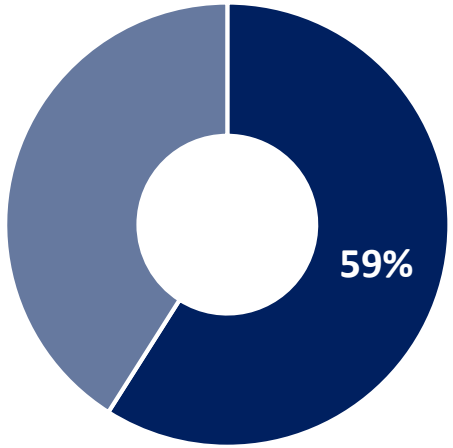
*62% have reduced hours

Offering vaccines*



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

Accepting new patients*



*Through August 1st

Source: Vogt TM, et al. *MMWR Morb Mortal Wkly Rep* 2020;69:859–863.

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 vaccination services get back on track, efforts needed to support providers and parents

Source: Vogt TM, et al. *MMWR Morb Mortal Wkly Rep* 2020;69:859–863.

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 programs 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.

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.

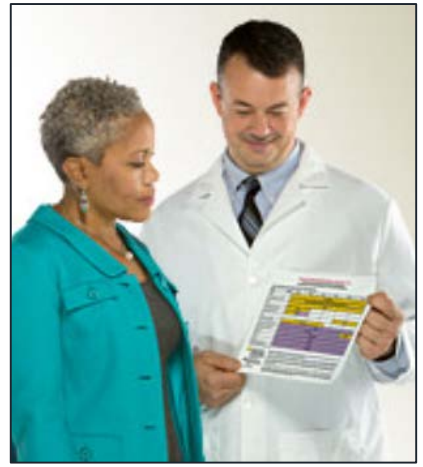
https://www.cdc.gov/vaccines/pandemic-guidance/index.html

Routine vaccination across the lifespan

- **Children and adolescents:** Reschedule missed well-child visits and/or vaccinations.
  - Start with newborns, infants, and children up to age 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

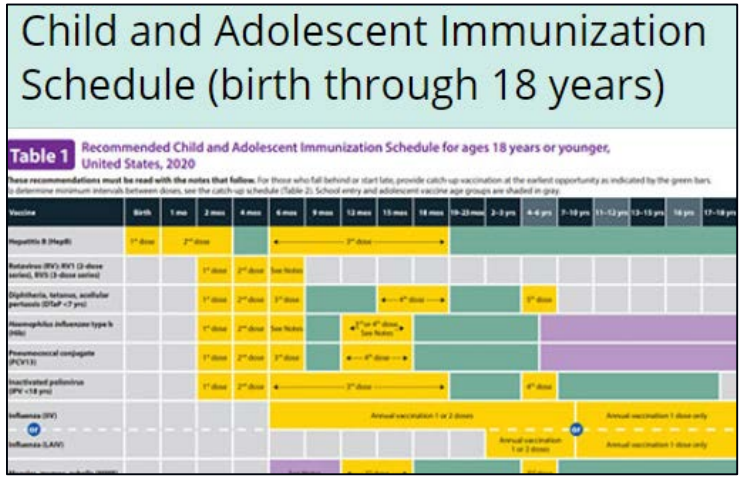


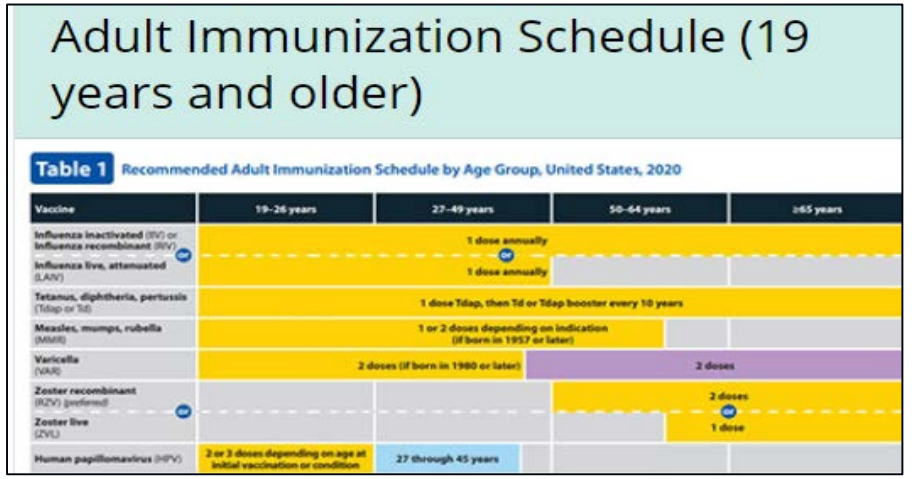
https://www.cdc.gov/vaccines/pandemic-guidance/index.html

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 during each visit.

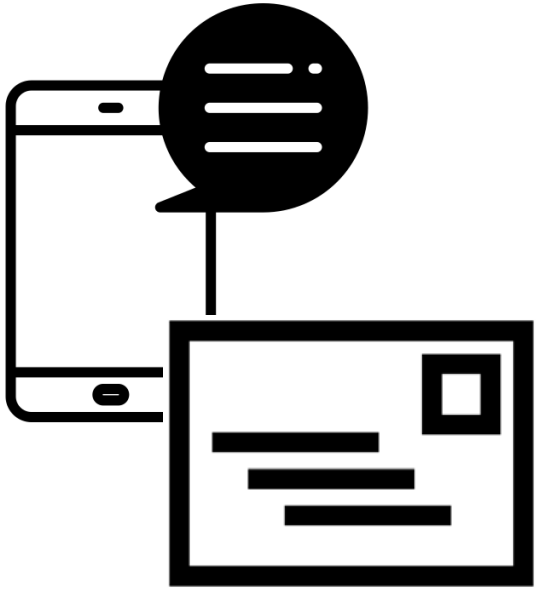




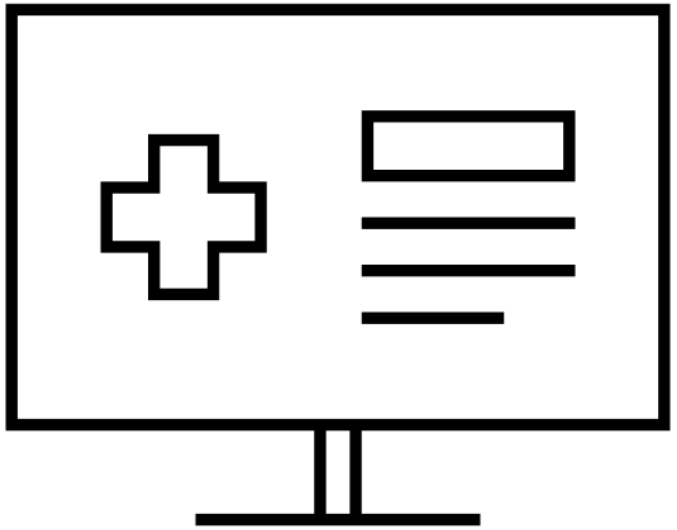
https://www.cdc.gov/vaccines/pandemic-guidance/index.html

Catch-up vaccination strategies

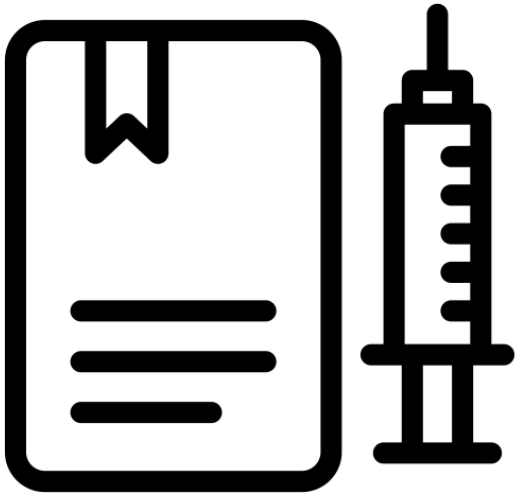
Reminder/recall systems



Forecasting through EMR or IIS



Standing orders



U.S. Community Preventive Services Task Force. Guide to Community Preventive Services. Vaccination Programs. https://www.thecommunityguide.org; Image credit: Noun project

Vaccine 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.

https://www.cdc.gov/vaccines/pandemic-guidance/index.html

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.

https://www.cdc.gov/vaccines/pandemic-guidance/index.html

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

- Screen patients for COVID-19 symptoms before and during visit.
- Ensure social 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.
- Enhance surface decontamination.

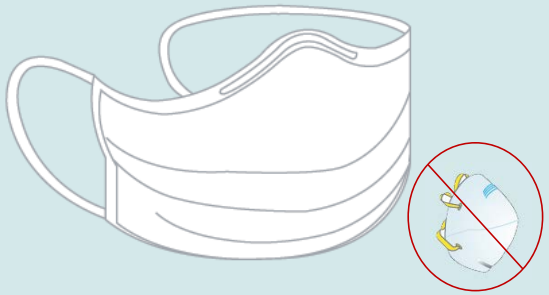
https://www.cdc.gov/coronavirus/2019-ncov/hcp/infection-control-recommendations.html

Practices for the safe delivery of vaccination services during the COVID-19 pandemic

- Follow general CDC guidance to prevent spread of COVID-19 in healthcare settings, including outpatient and ambulatory care settings.

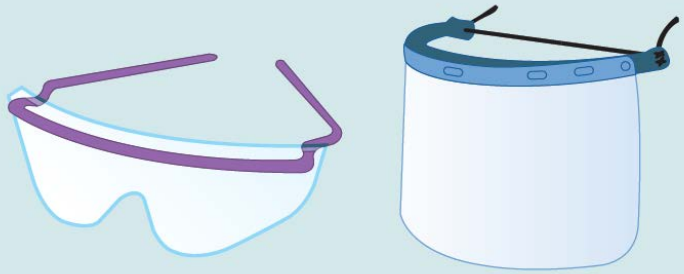
Personal protective equipment

Face mask



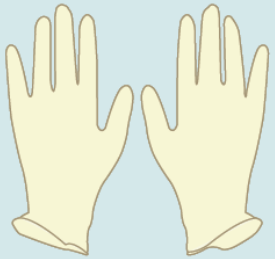
- **Recommended**: All healthcare providers
- N95 masks not recommended

Eye protection



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

Gloves

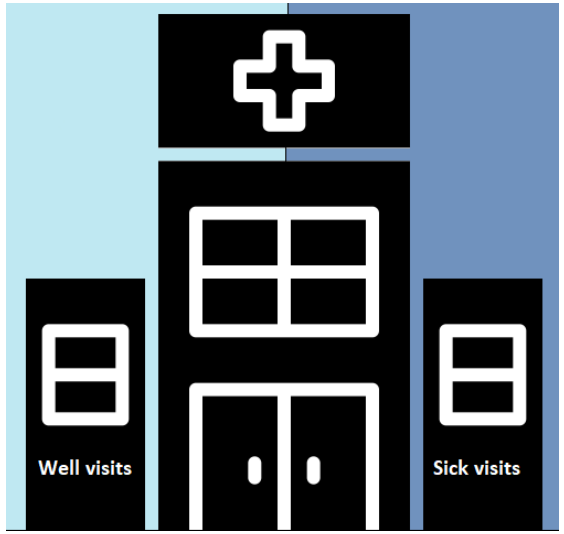


- **Recommended**: Intranasal or oral vaccines
- **Optional**: Intramuscular or subcutaneous vaccines

https://www.cdc.gov/vaccines/pandemic-guidance/index.html; Image credit: Pan American Health Organization

Ensure physical distancing during vaccination visits

Separate sick from well patients

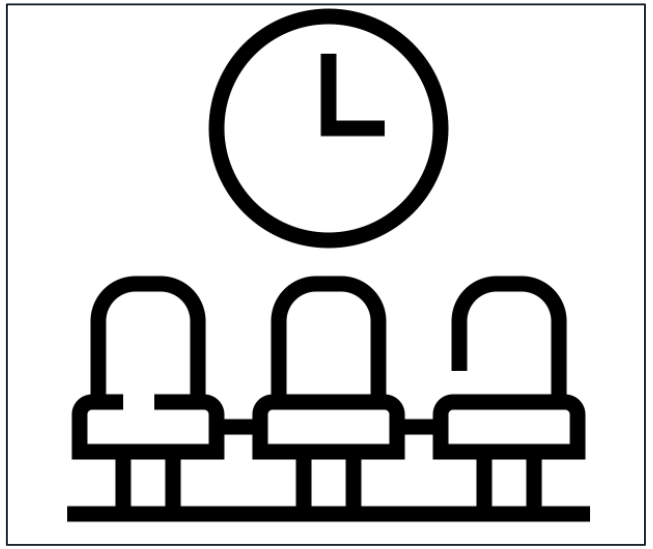


- Schedule well and sick visits at different times of the day
- Place sick visits in different areas of the facility or different locations

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

https://www.cdc.gov/vaccines/pandemic-guidance/index.html; Image credit: Noun Project, CDC

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.

https://www.cdc.gov/vaccines/pandemic-guidance/index.html

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 because of recent loss of 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.

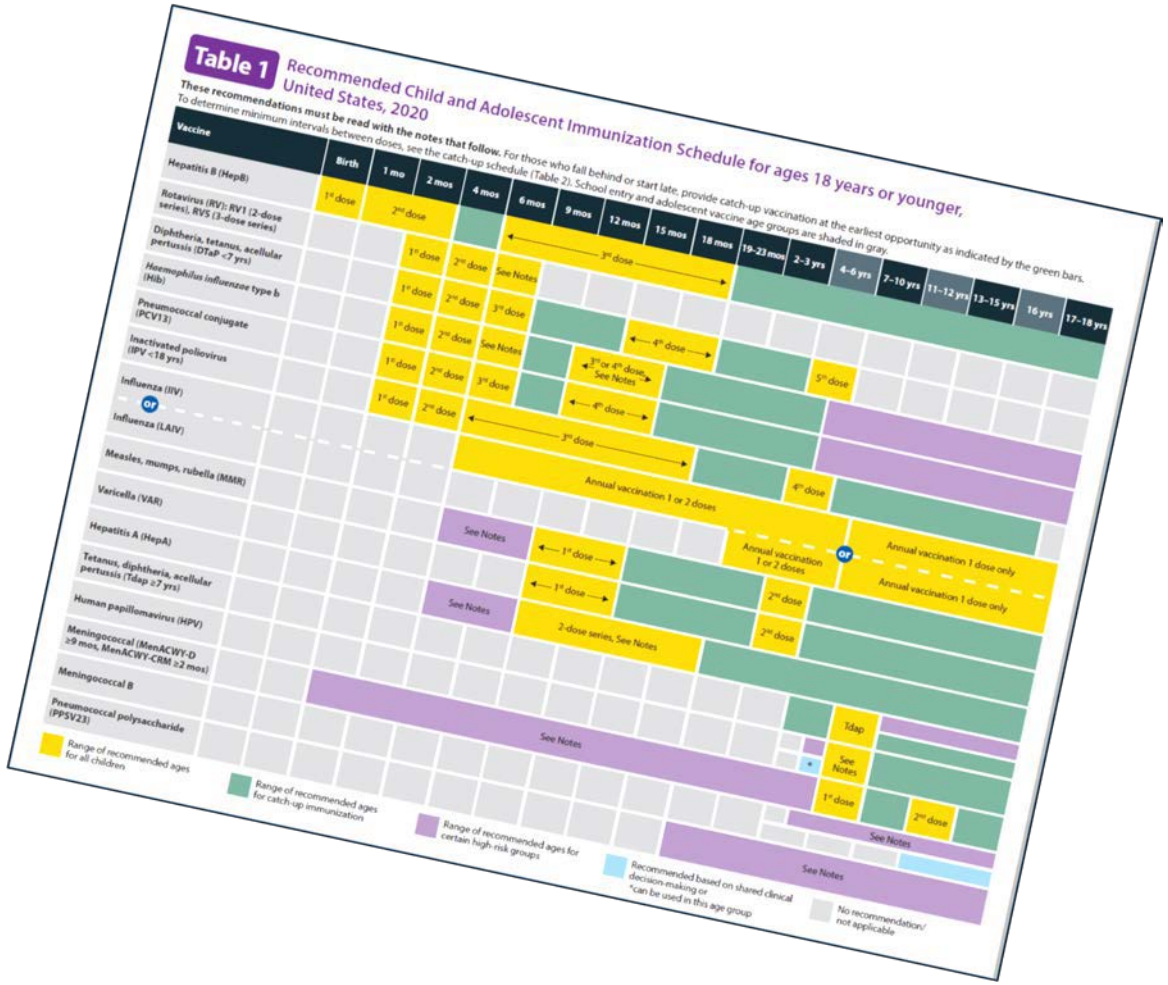
https://www.cdc.gov/vaccines/programs/vfc/index.html

Back-to-school vaccination

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

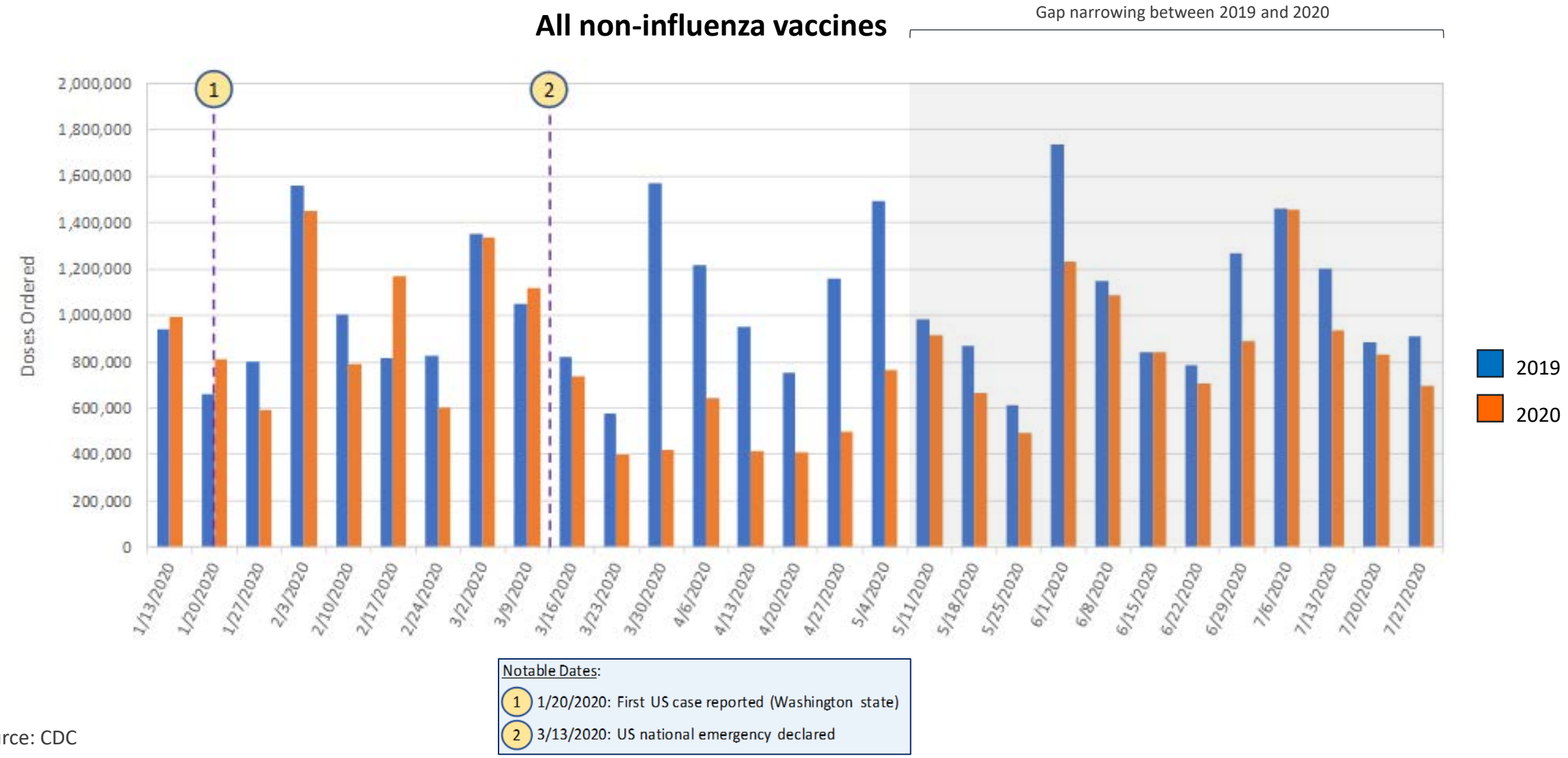
- Many school-age children at risk for undervaccination and non-compliance with school vaccination requirements

- Important to augment back-to-school vaccination clinics to ensure that children have an opportunity for vaccination



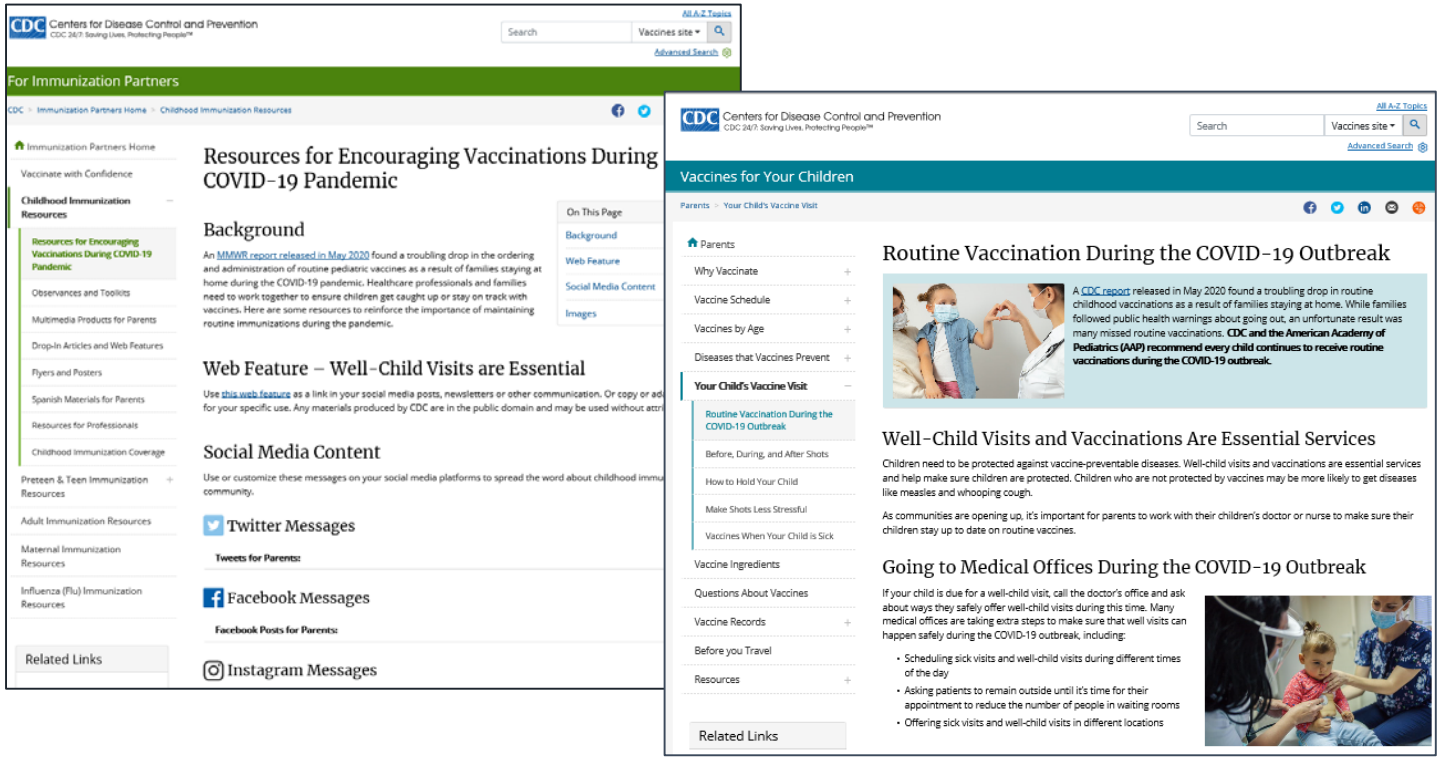
Signs of recovery in routine childhood vaccination

Weekly Vaccines for Children program provider orders for pediatric vaccines – United States, January 13, 2019-August 2, 2020



Source: CDC

Resources for communicating with parents about routine vaccination during the COVID-19 pandemic



CDC resources for parents and immunization partners

AAP's #CallYourPediatrician campaign

www.cdc.gov/vaccines/routine
www.cdc.gov/vaccines/partners/childhood/stayingontrack.html
www.aap.org/en-us/about-the-aap/aap-press-room/campaigns/call-your-pediatrician

Conclusions

- Substantial disruptions to routine childhood vaccination services have 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.

Contact Information:

CAPT Sarah Schillie, MD, MPH: ggi1@cdc.gov
Jessica MacNeil, MPH: aji8@cdc.gov

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

Other resources for healthcare professionals

#HowIRecommend videos

www.cdc.gov/vaccines/howirecommend

How to create a culture of immunization

- Customizable slide deck
  - Content geared for nurses, medical assistants, and non-clinical office staff
  - Intended for use by physicians or vaccine coordinators during staff meetings or lunch-and-learn presentations
  - Can be customized with an organization's slide template and logo
  - Health departments can also modify and use during HCP training.

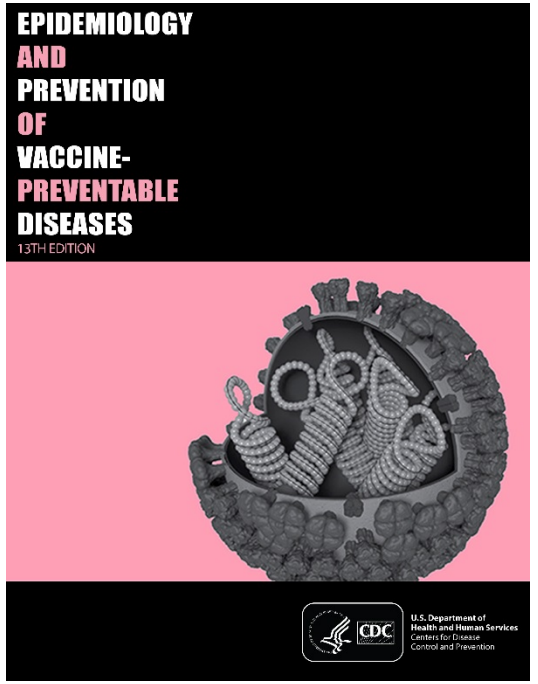
- CDC continuing education course for nurses and medical assistants

www.cdc.gov/vaccines/partners/childhood/professionals.html#presentation-10-ways

www.cdc.gov/vaccines/ed/vaccine-communication/foster-culture-of-immunization.html

Immunization training resources

- ***You Call the Shots:*** Web-based modules that discuss vaccine-preventable diseases (VPDs) and explain the latest recommendations for vaccine use. CE/CME credit offered.
- **Current Issues in Immunization Webinars**: Live, 1-hour, audio and visual presentations with on-demand replays. Offered 4-5 times per year. CE/CME credit offered.
- **Pink Book Webinar Series:** Online series of 15 1-hour webinars. Provides an overview of the principles of vaccination, general recommendations, immunization strategies for providers, and specific information about VPDs and vaccines. CE/CME credit offered.
- **Webcasts:** Topics include HPV, pertussis, flu, vaccine storage and handling, and more. CE/CME credits offered.



www.cdc.gov/vaccines/ed/

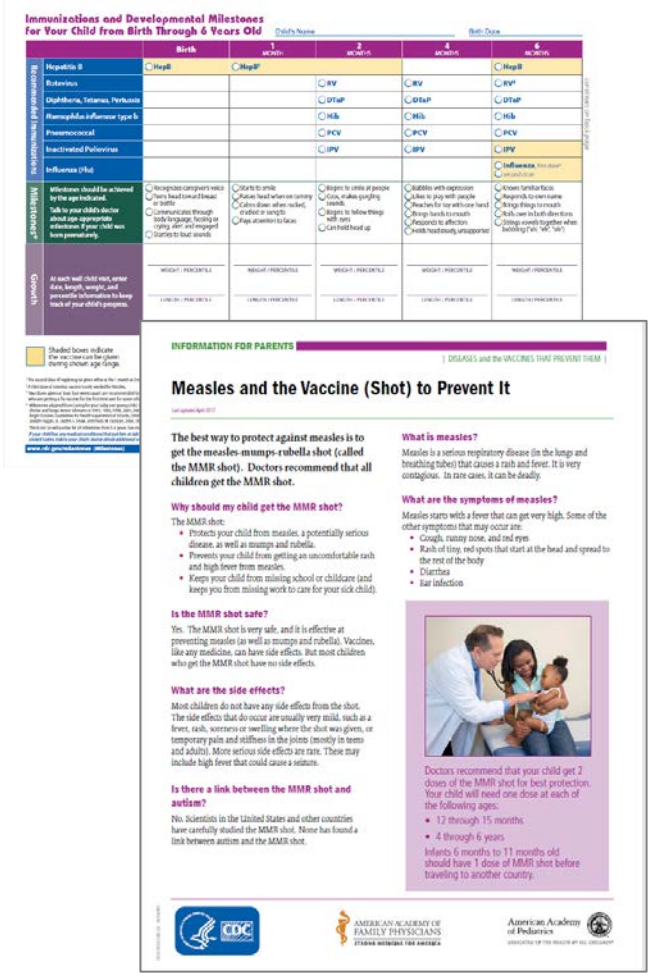
CDC-Medscape CME programs

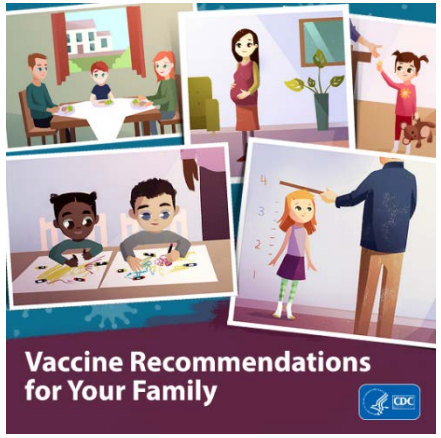
- Making the Case: Championing for HPV Cancer Prevention in Your Practice
  https://www.medscape.org/viewarticle/898084

- Medscape CME: Pediatric Immunization: Navigating Difficult Conversations with Parents
  https://www.medscape.org/viewarticle/907254

Other resources for parents

Infant immunization resources





www.cdc.gov/vaccines/parents/resources/childhood.html

Infant immunization FAQs

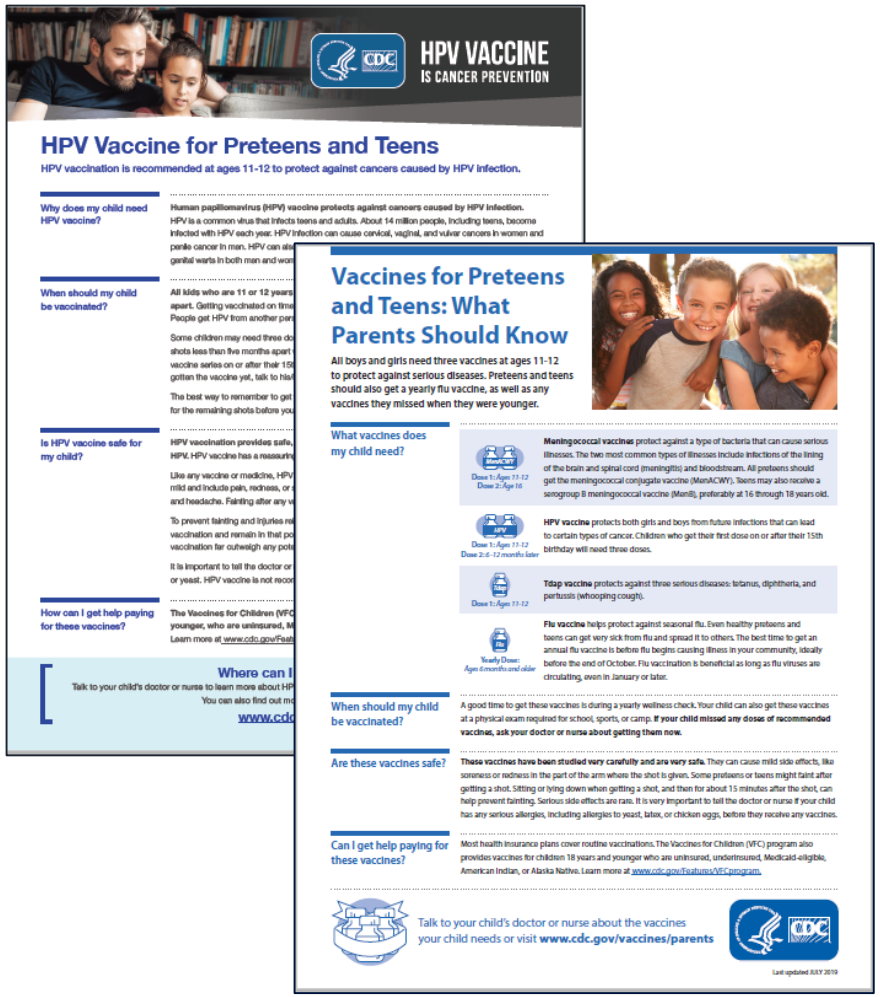
- Written for parents of children ages 0-2
- English and Spanish
- HTML and PDF
- Co-branded with AAP and AAFP

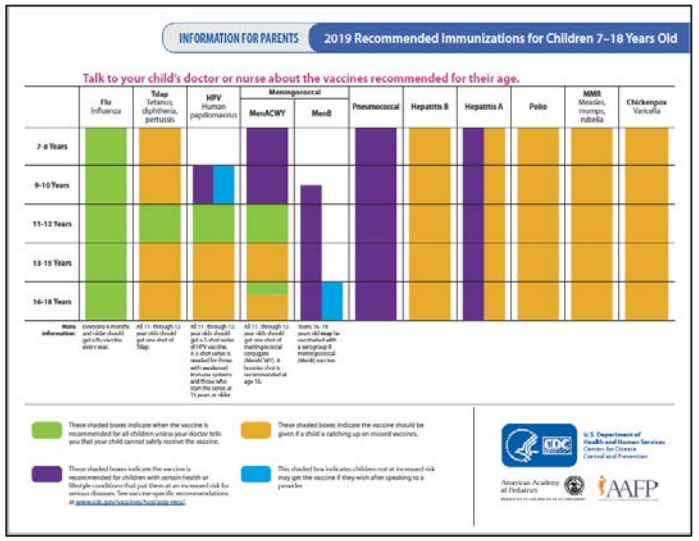
https://www.cdc.gov/vaccines/parents/FAQs.html

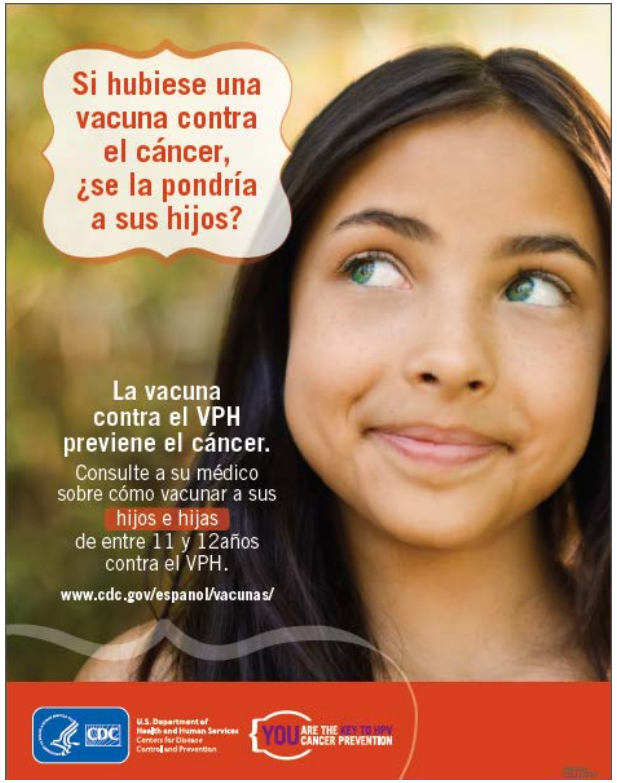
Instagram Q&A event for parents of young children

- Date: Monday, August 24 from 12:00-2:00pm EDT
- Topic: Staying up to date on vaccines during the COVID-19 pandemic
- What: CDC experts will provide real-time answers to questions
- Where: CDC's Instagram feed: instagram.com/cdcgov

Adolescent immunization resources



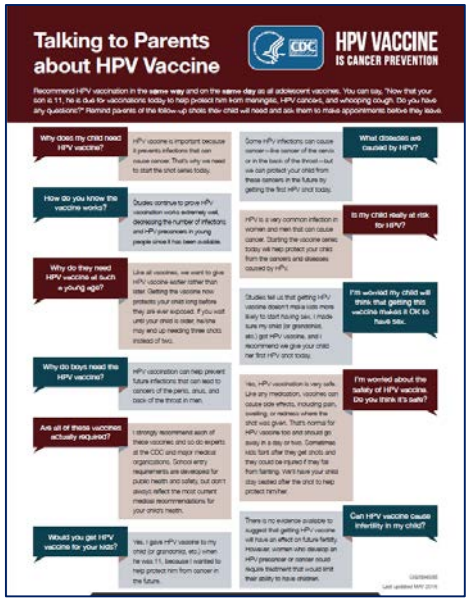


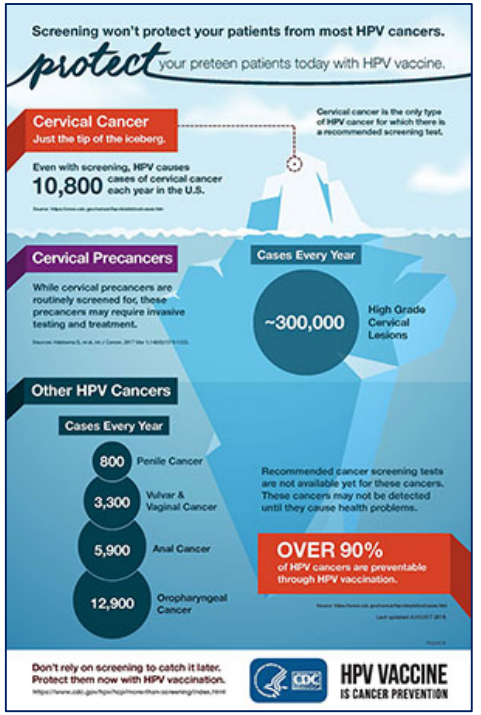


www.cdc.gov/vaccines/partners/teens

HPV vaccine resources

- Clinical guidance
- Tips for boosting vaccination rates
- CE courses
- #PreteenVaxScene webinars
- Tips for talking with parents
- Fact sheets for parents





www.cdc.gov/hpv/hcp

Questions?

Dr. Sarah Schillie

Jessica MacNeil

Thank You!

Webinar archive will be available at:

www.phf.org/immunization

Questions or comments?

immunization@phf.org