



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

August 19, 2020

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Today's Presenters



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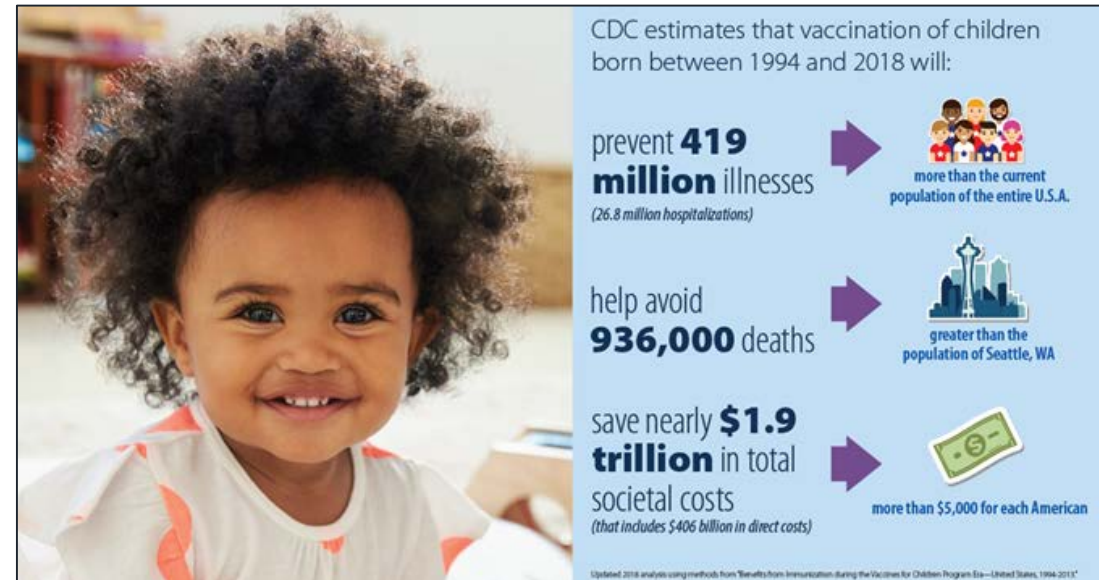
Polls: Tell us a little about yourself!



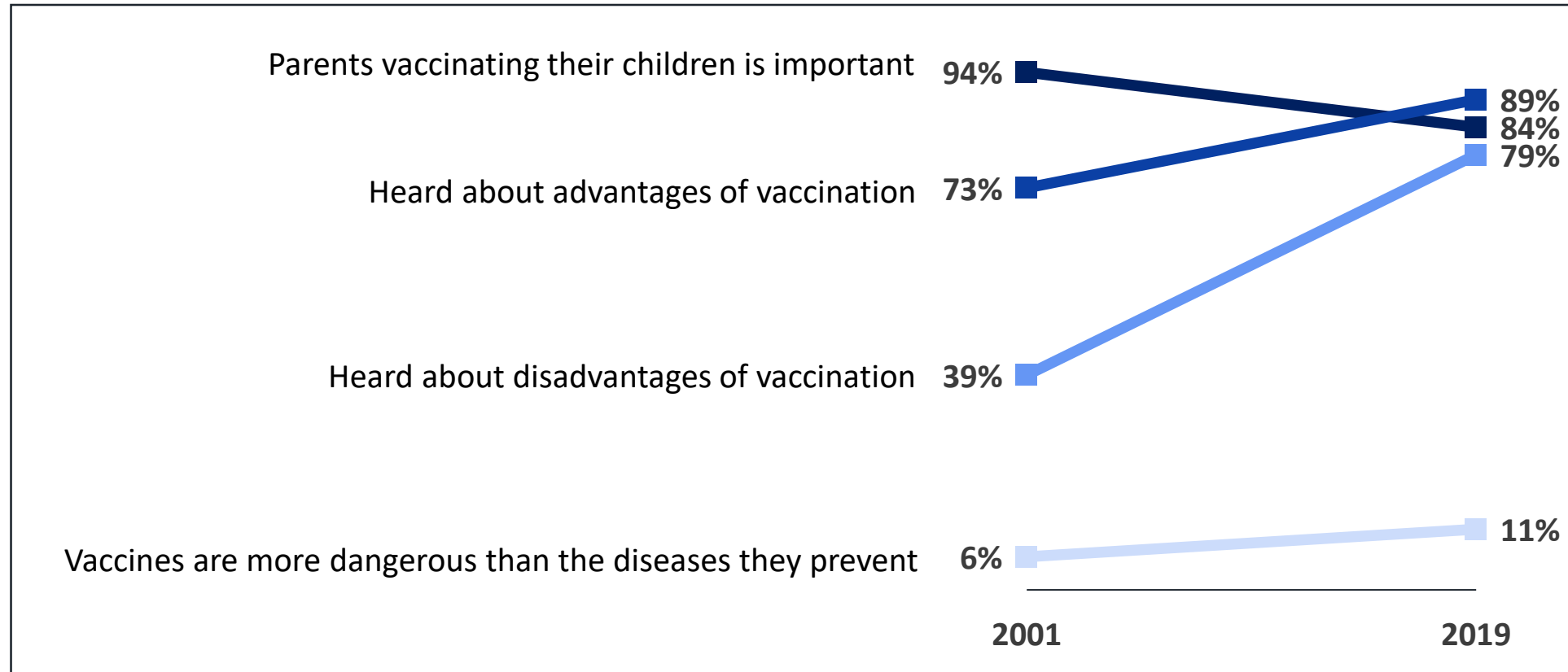
Vaccine acceptance remains high among U.S. parents

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.

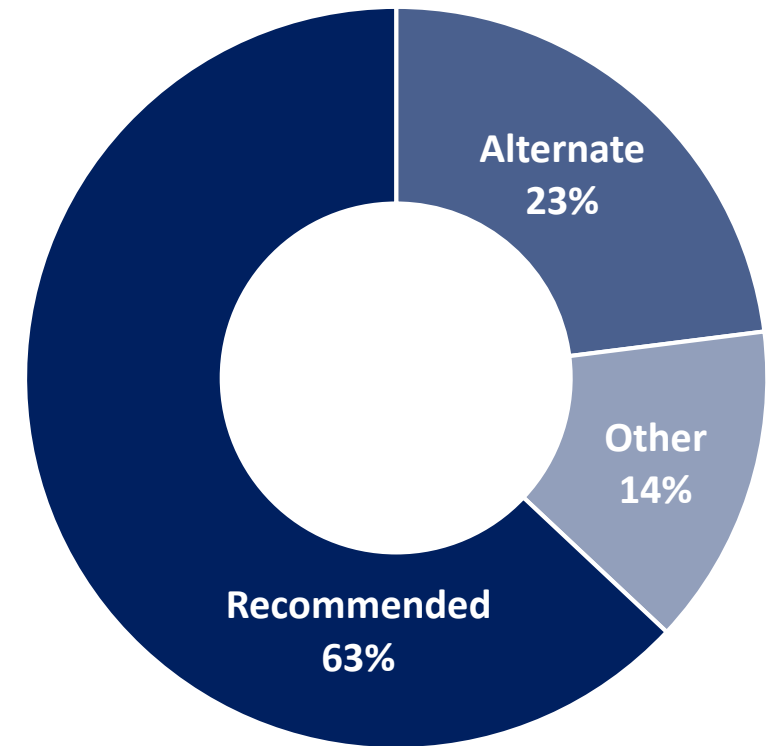


Complacency and vaccine concerns increasing



Vaccine delays or refusals a growing concern

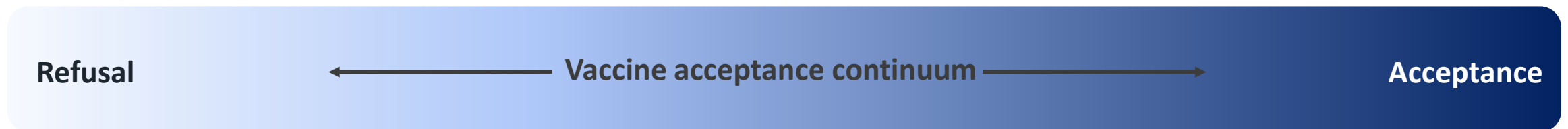
- Nearly **one-quarter** of young children vaccinated according to an alternative schedule.
- **2.5%** of kindergartners have a vaccine exemption.
 - Rate slightly increasing over time



Vaccination schedule
pattern by age 19 months

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



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

**Routine childhood
vaccines**

6%

Influenza vaccine

26%

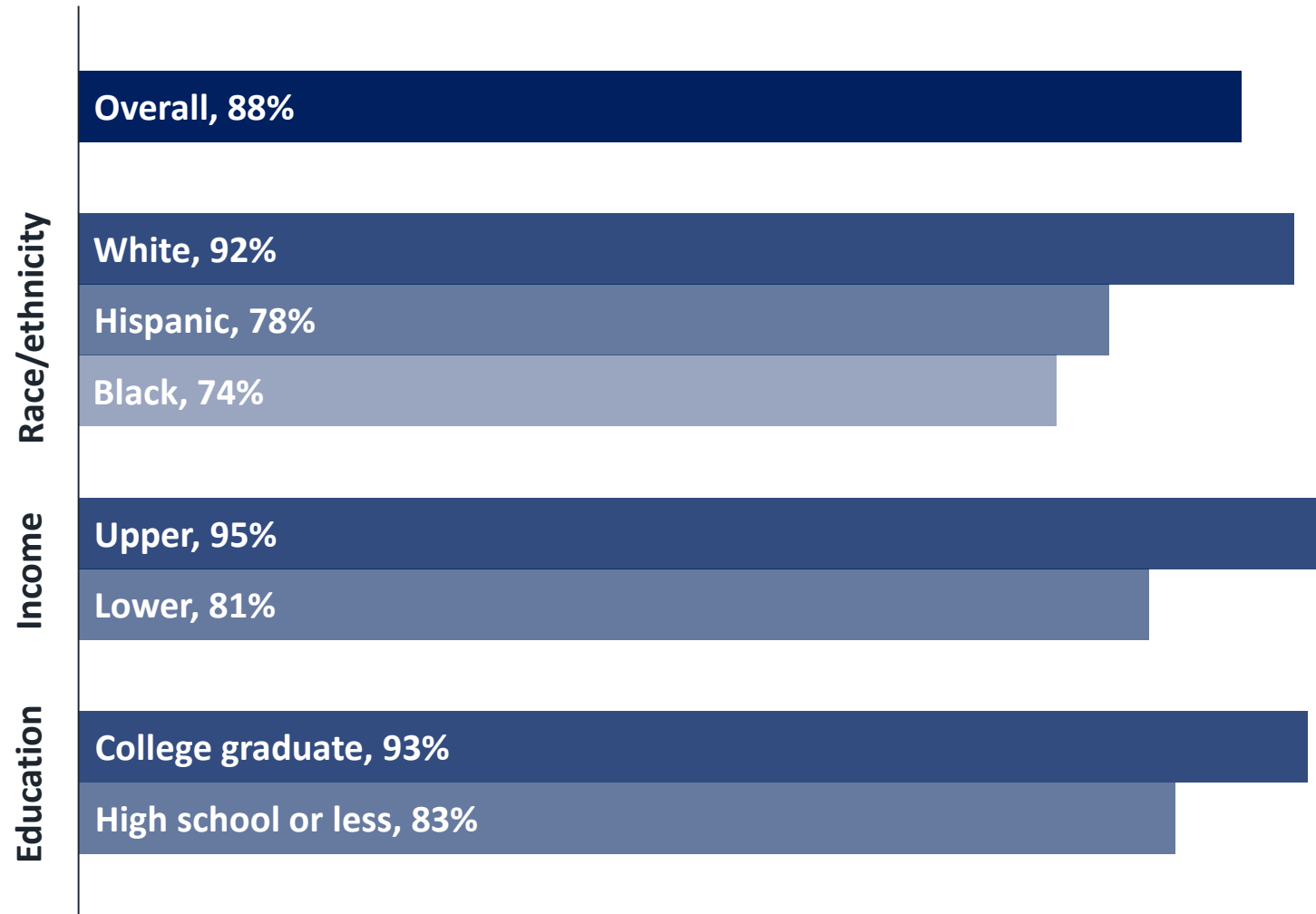
Why are some parents hesitant to vaccinate?

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



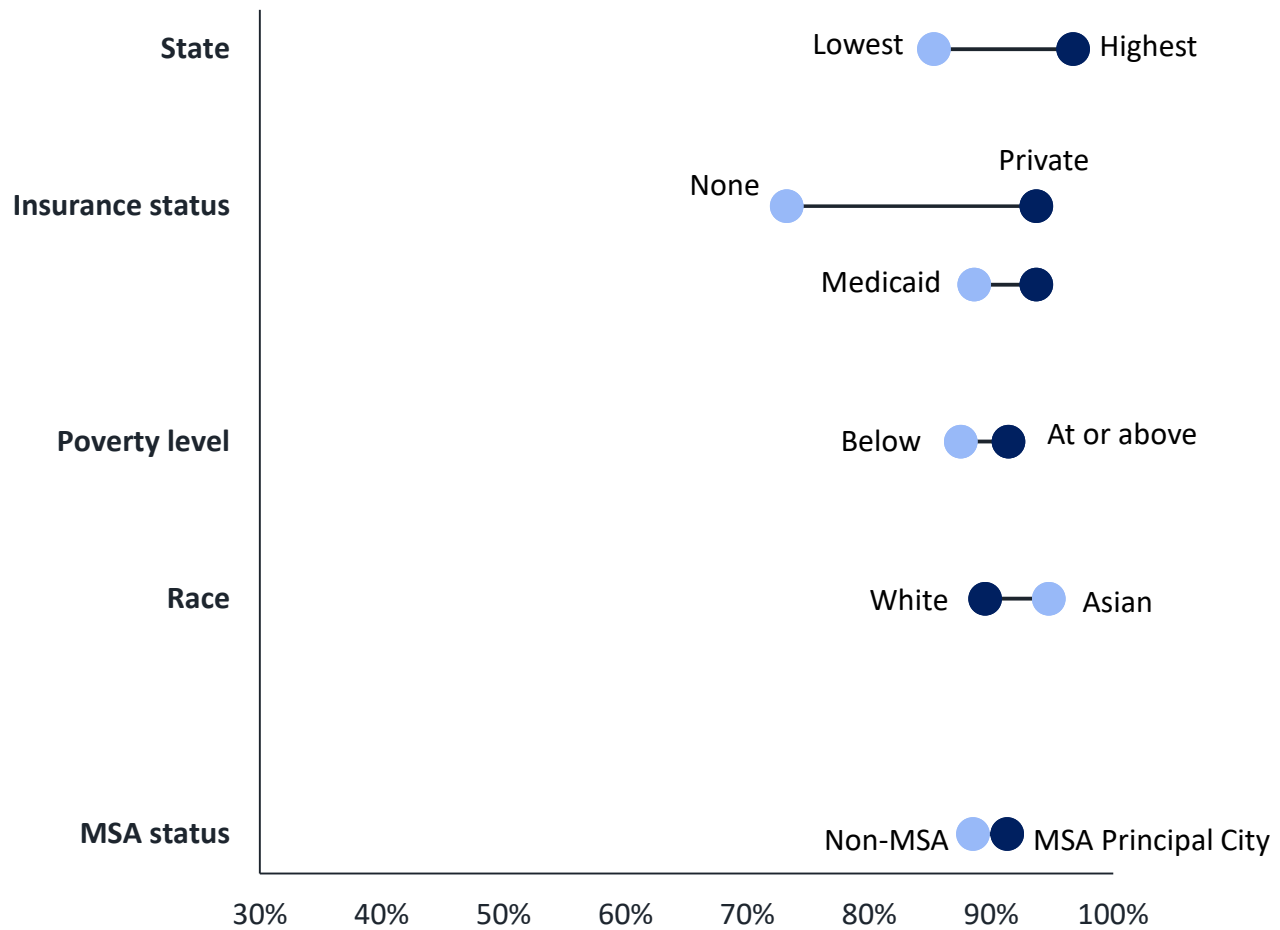
Vaccine skepticism higher in certain groups

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

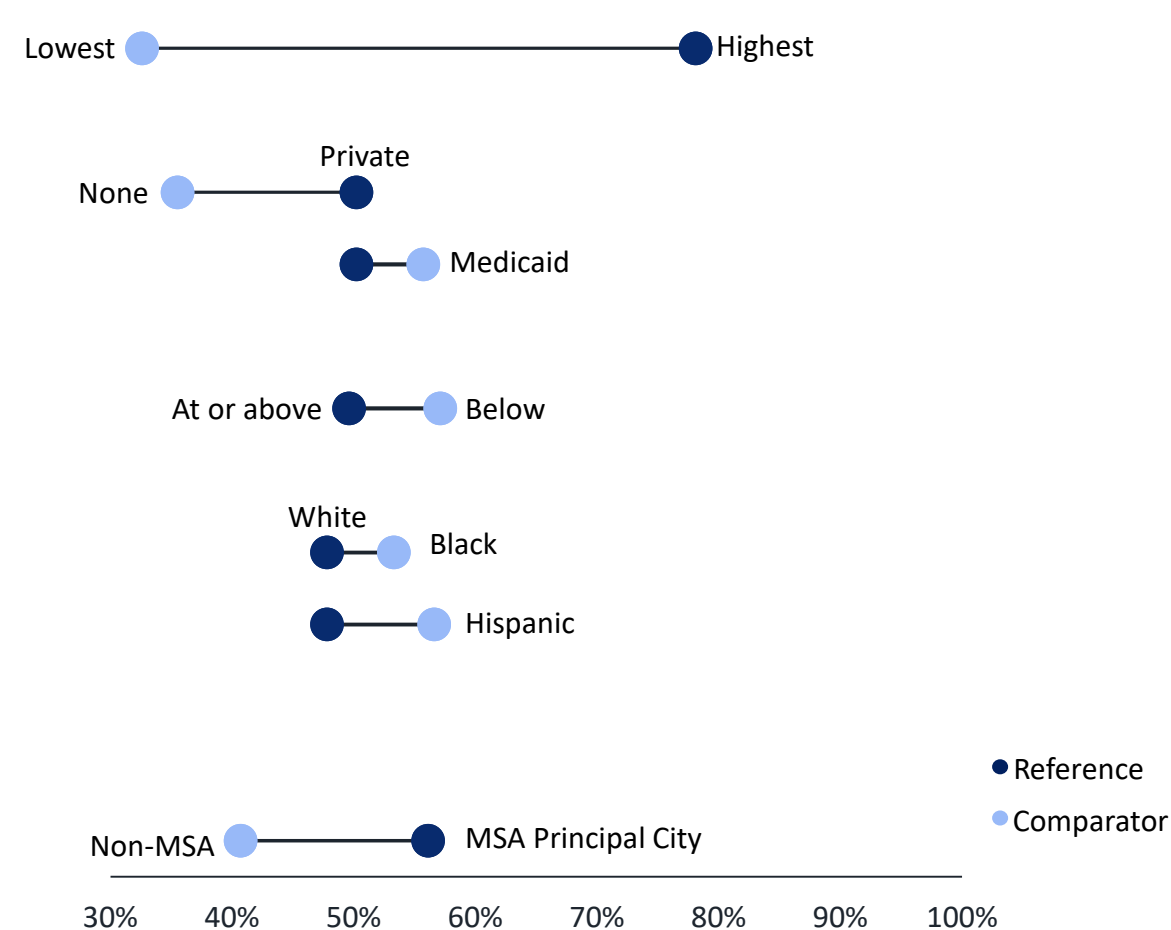


Vaccine access issues and disparities persist

≥1 MMR dose by age 2 years



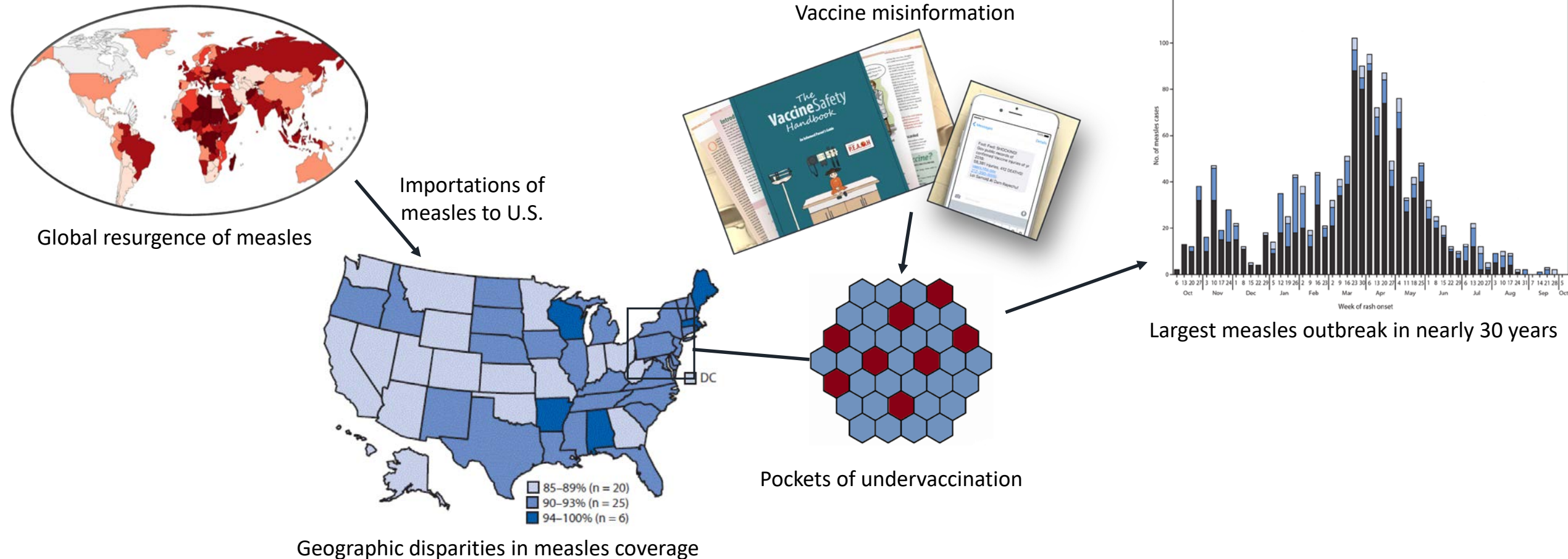
Up to date on HPV vaccine among 13-17 year-olds



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



Strengthening vaccine confidence and acceptance

Where do we go from here?

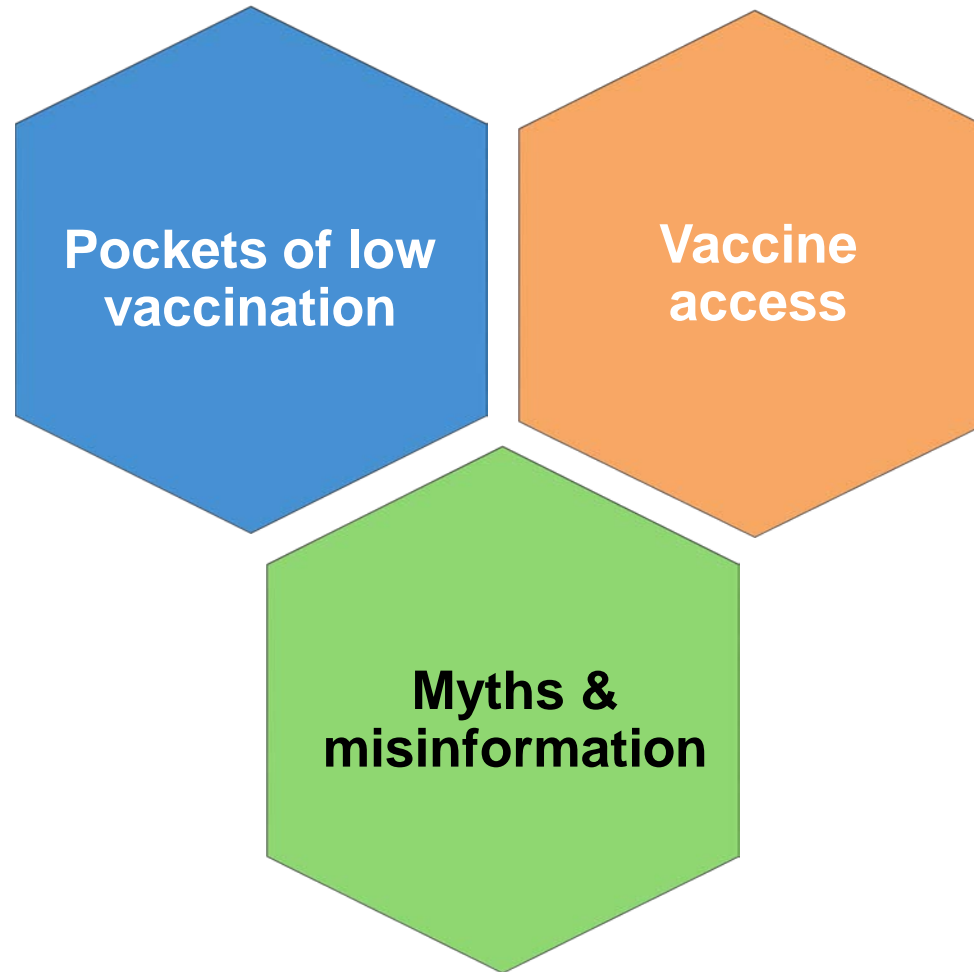


Vaccinate with **Confidence**

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

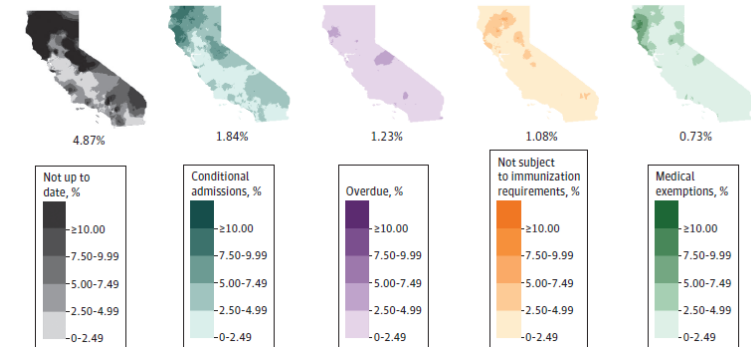
Use local partners and trusted messengers, establish new partnerships to contain the spread of misinformation, and educate critical stakeholders about vaccines.

Protect communities

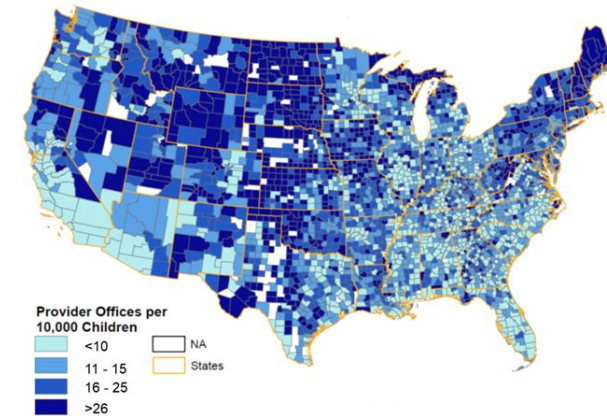
Strategy: Protect communities at risk from under-vaccination.

- ✓ 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

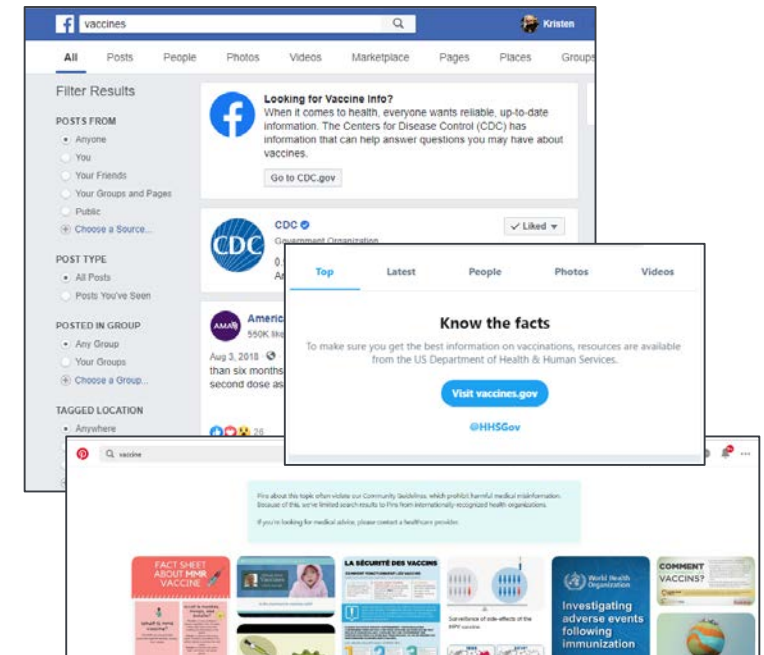


Improve access to VFC for eligible children

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.

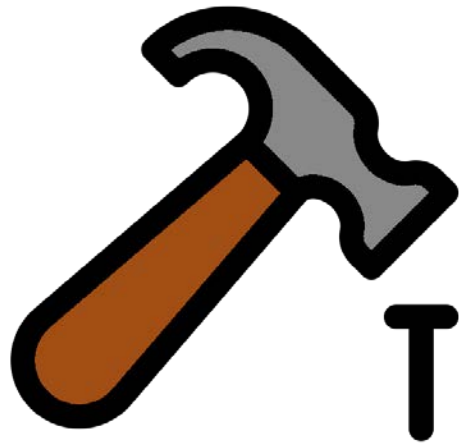


Making the vaccine decision

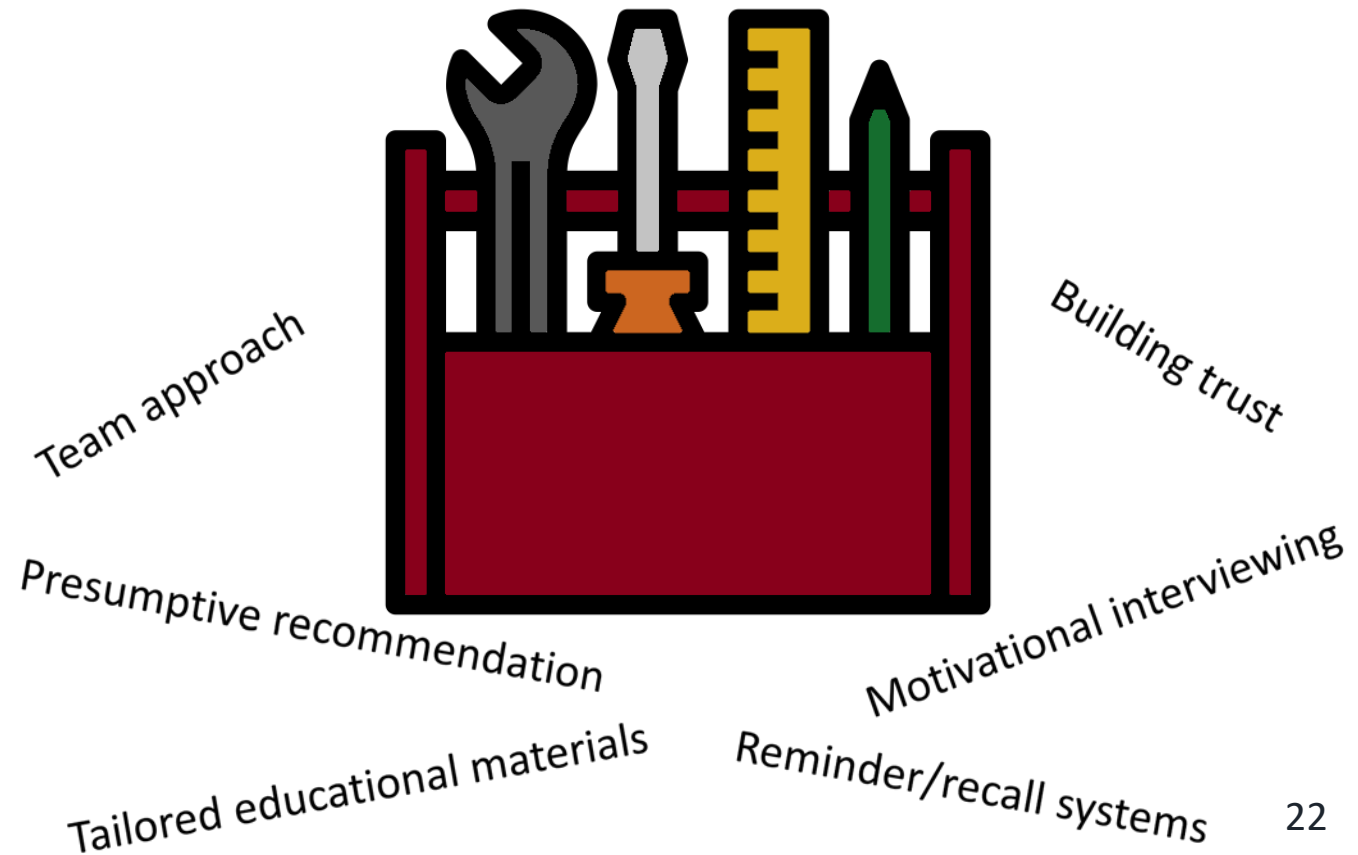
How pediatric providers can empower families and create a culture of immunization in their practices

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



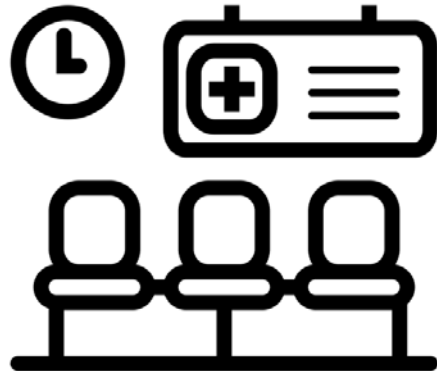
Consistent messages on the importance of vaccines throughout the visit and beyond

Check-in



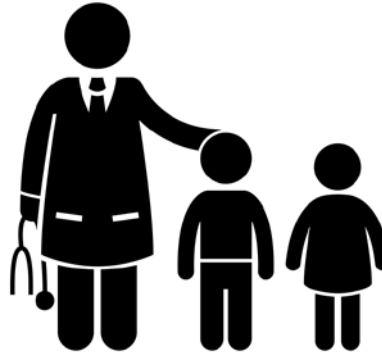
- Remind parents that vaccines are due
- Vaccine Information Statements (VISs)
- Vaccine info in new patient packet

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

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?

Scientific competency
Spending time with patient
Listening, acknowledging, responding to questions or concerns
Caring disposition
Treating patient as an individual

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

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

“Joey is going to get vaccines to protect against seven diseases today: diphtheria, tetanus, whooping cough, rotavirus, Hib, pneumococcal disease, and polio”

Presumptive approach

“What do you want to do about Joey’s shots today?”

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

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.”

Addressing vaccine myths

DO

- ✓ Emphasize the fact
- ✓ Give alternative explanation to fill the gap
- ✓ Provide references

DO NOT

- ⊗ Emphasize the myth
- ⊗ Give no alternative explanation for the potential causes of autism
- ⊗ Use complex language

? WHAT ABOUT AUTISM*

Many large studies have found that vaccines do not cause autism.

HOW DO WE KNOW?

Many good studies have compared the health of large numbers of vaccinated and unvaccinated children over many years and found that vaccinated and unvaccinated children were as likely to develop autism. (References to scientific studies).

THEN WHAT CAUSES AUTISM?

It is not known exactly why some children develop autism. Current research suggest that autism has many causes. (References to scientific studies).

DO VACCINES CAUSE AUTISM?

Medical researchers and scientists around the world have **NOT** found a link between vaccines and autism.

The study that had initially reported a link between the measles-mumps-rubella (MMR) vaccine and autism was **RETRACTED** in 2011.

EVIDENCE-BASED REVIEWS have rejected any casual associations between the MMR vaccine and autism spectrum disorders in children.

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%**

Motivational interviewing

- Empathy
- Collaboration
- Evocation
- Support for autonomy

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? <i>(build rapport, seek questions and concerns)</i>
Mother:	Well, I'm pretty nervous – he seems so young.
Health professional:	You sound quite worried <i>(empathic response)</i> let's talk it through together, tell me what you are concerned about? <i>(further building rapport and eliciting concerns)</i>
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 <i>(guiding)</i> but do you have other worries as well? <i>(eliciting further concerns)</i>
Mother:	Well I read also that they can get a sore leg afterwards, so that's another worry.
Health professional:	<i>(pausing to allow mother to interject if she has questions and to observe body language)</i> Right, let's talk about the five ingredients and then we can talk about the chances of getting a sore leg <i>(signposting and structuring of explanation)</i> . You're right that the injection has got five ingredients which would protect Robbie from the diseases called diphtheria, tetanus, whooping cough, polio and <i>Haemophilus influenzae</i> b (Hib). It seems a lot doesn't it <i>(empathic response)</i> . 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. <i>(chunk of information provided followed by pause for mother to raise further questions and health professional to observe mother's body language)</i> .
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 <i>(empowering)</i> . 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 <i>(acknowledging)</i> – 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? <i>(avoid being overly persuasive, positive framing of risk)</i>
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.

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

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

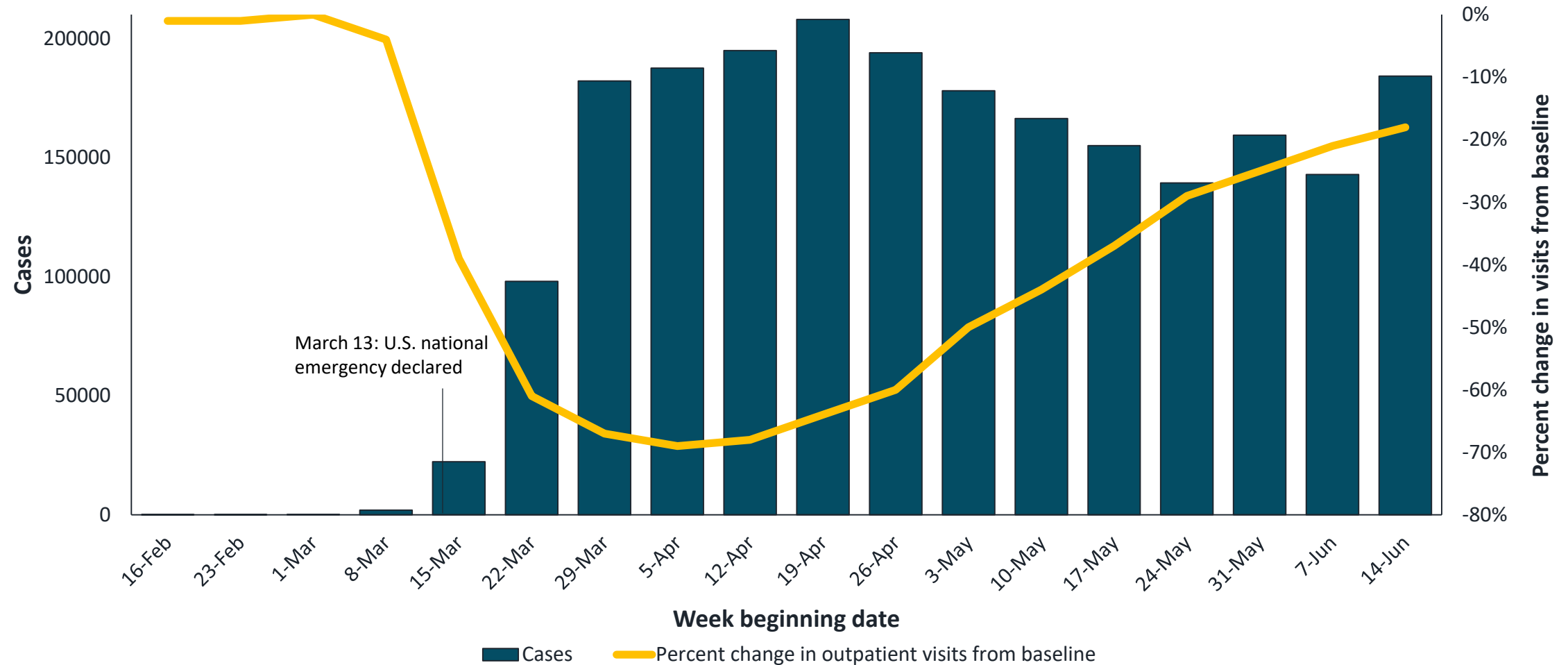


Strengthening vaccine confidence and acceptance

More important than ever

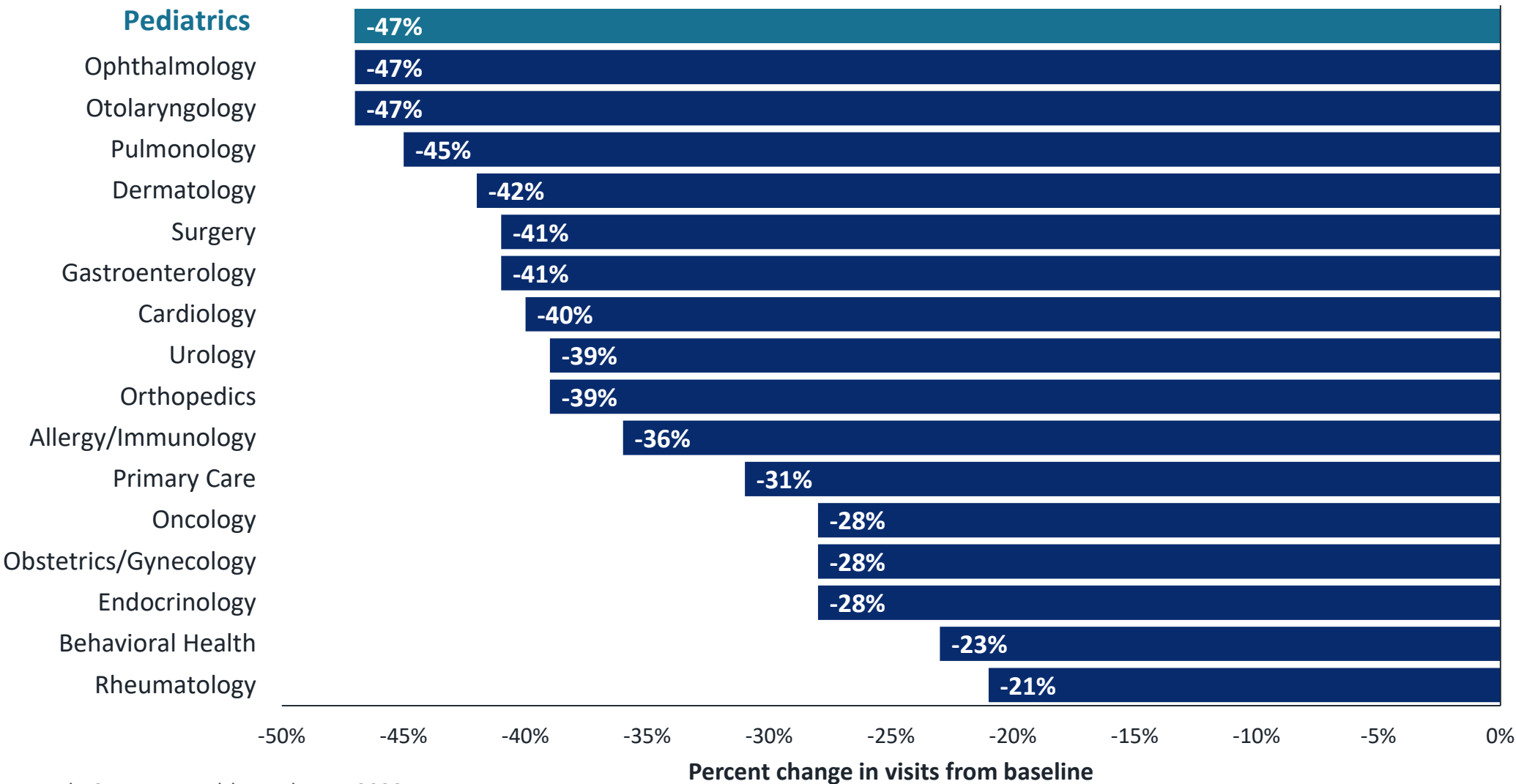
Substantial disruptions to outpatient medical care during COVID-19 pandemic

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

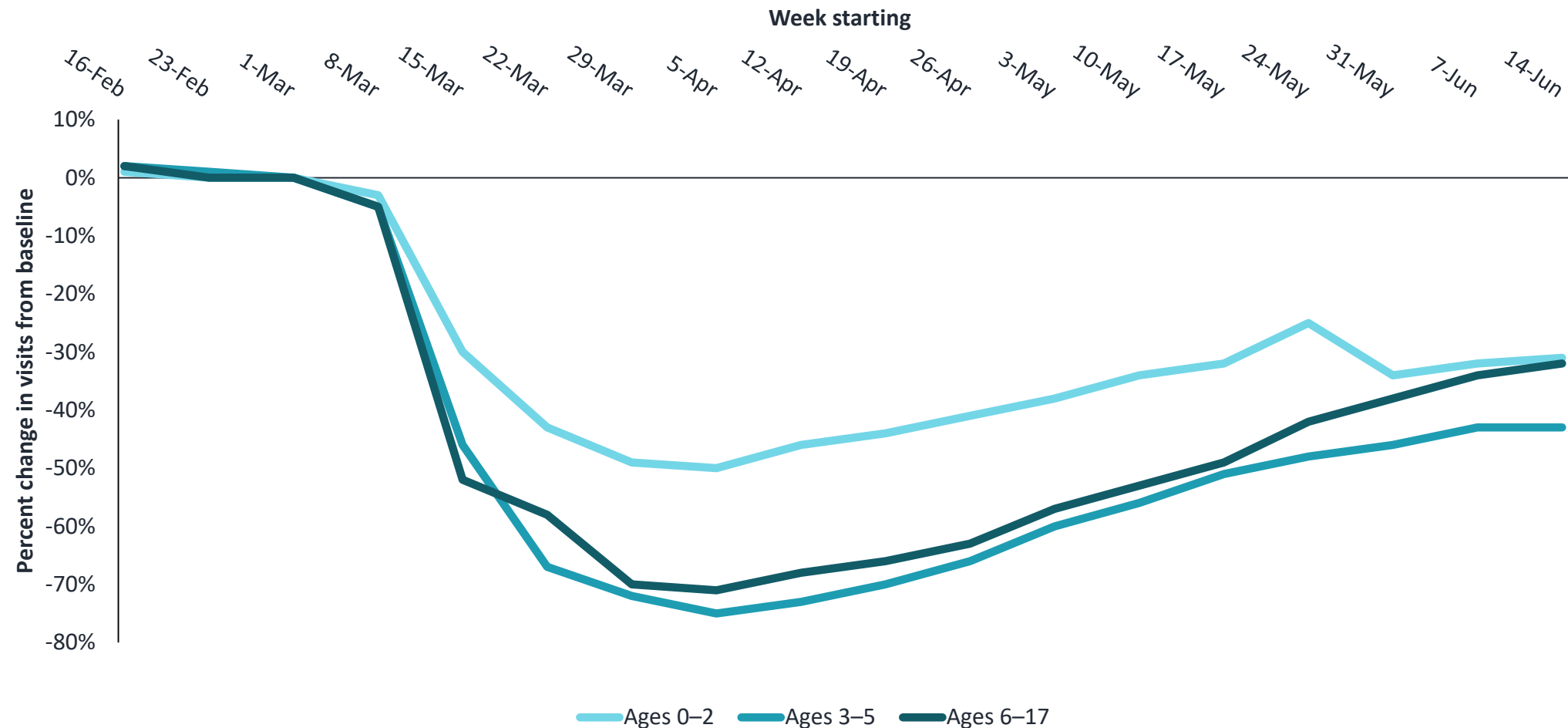


Pediatrics among the hardest-hit specialties

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

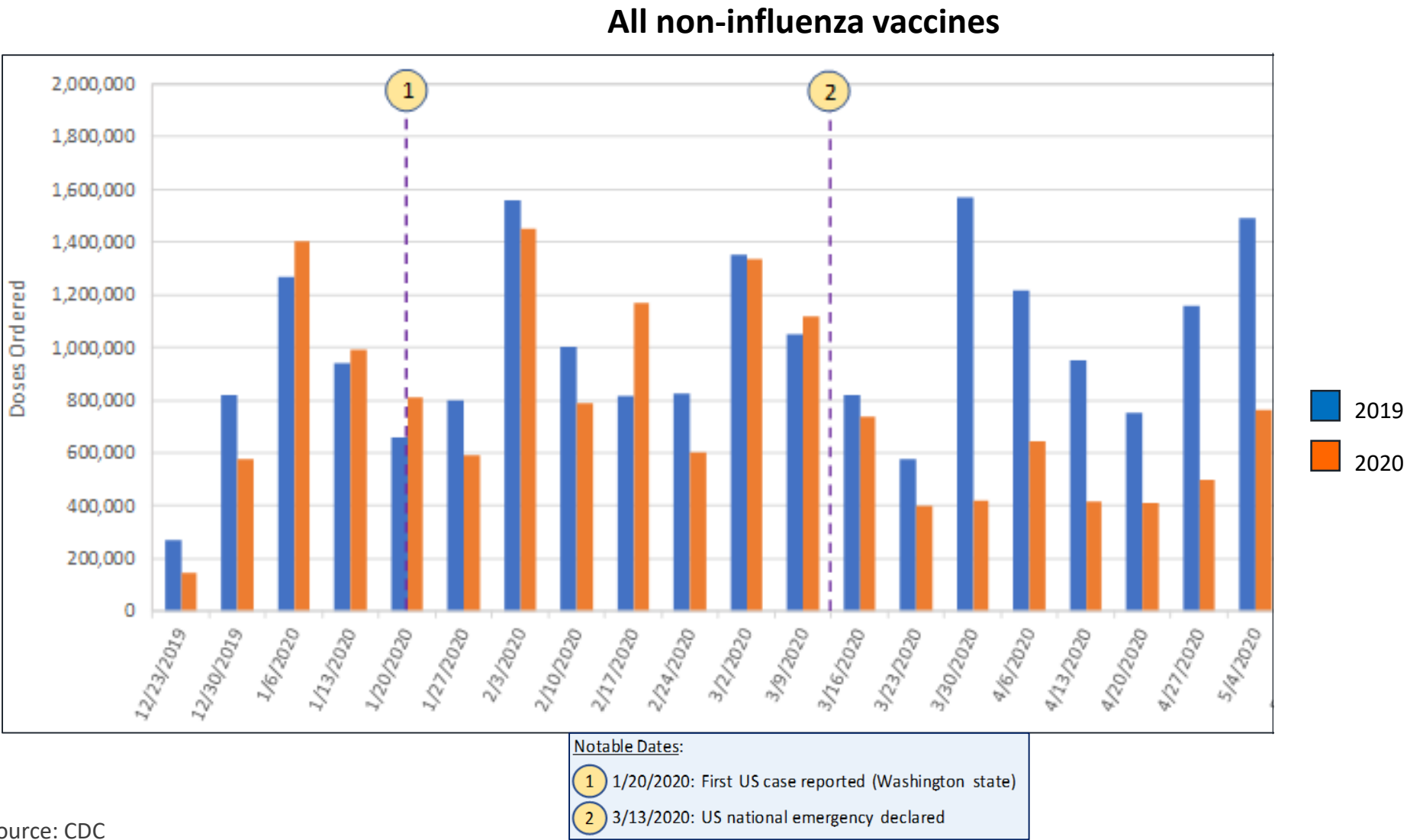


Disruptions in outpatient medical care among all pediatric age groups during COVID-19 pandemic



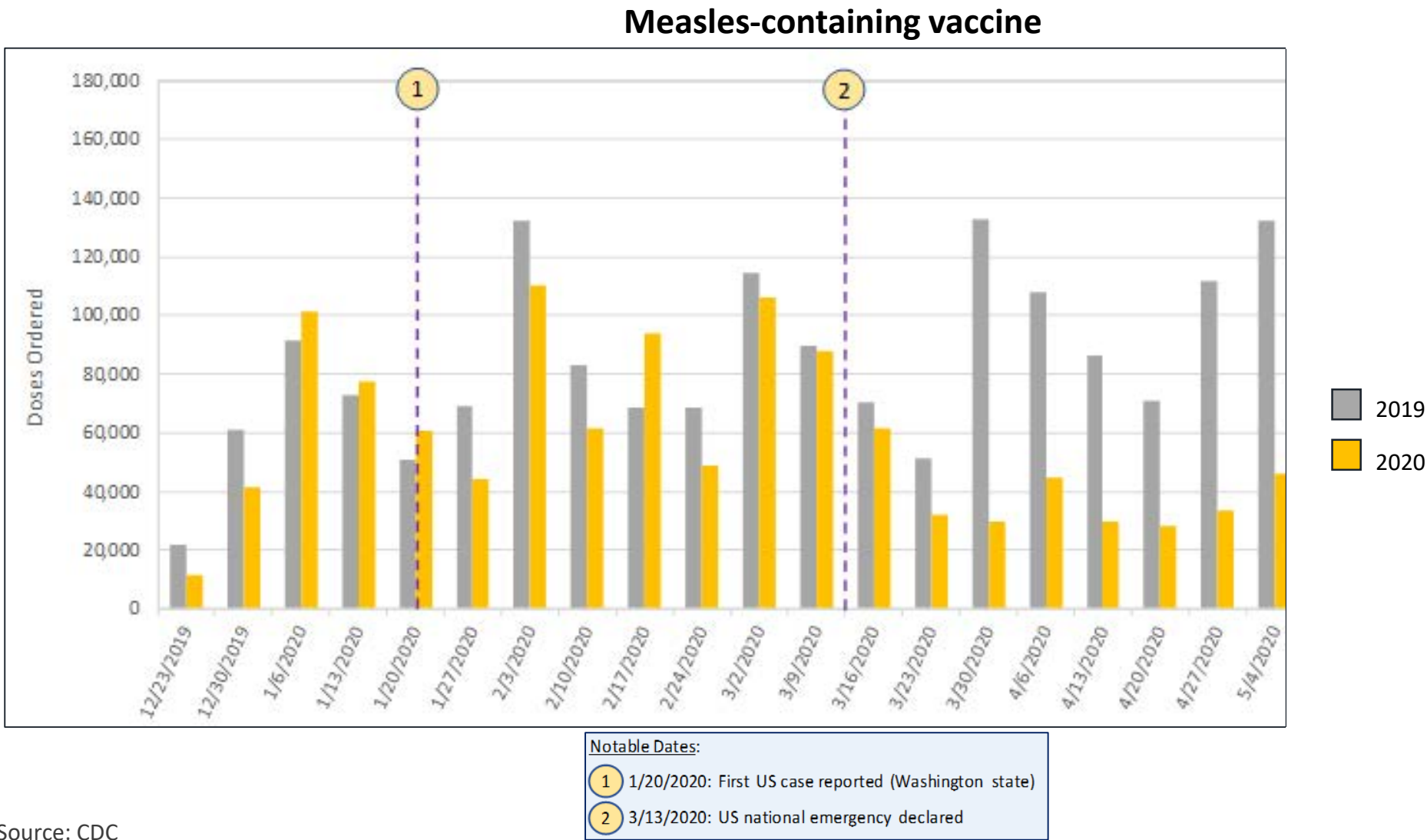
COVID-19 pandemic and disruptions to routine childhood vaccination

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



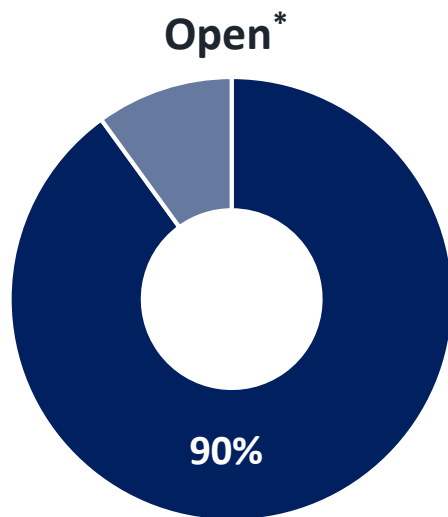
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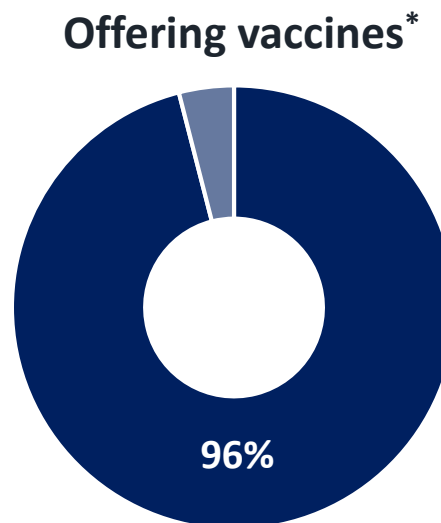


What is the capacity among pediatric providers to administer vaccines?

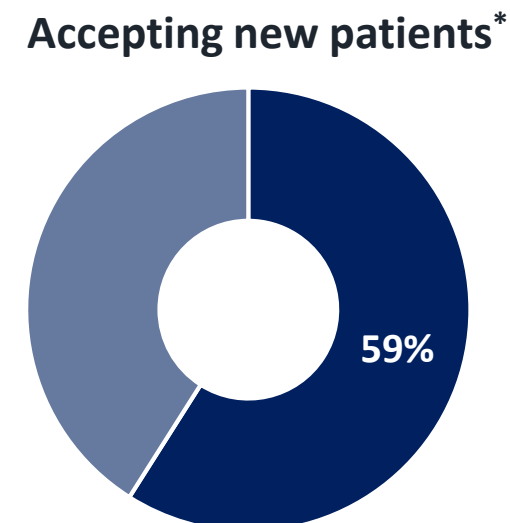
- Vaccines for Children (VFC) program provides vaccines at no cost to eligible children; ~38,000 enrolled practices encompass ~86% of U.S. pediatricians
- Among 1,933 VFC-enrolled practices, the majority are currently open, offering vaccines, and able to accept new patients (as of May 20, 2020),



*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 vaccination 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 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.

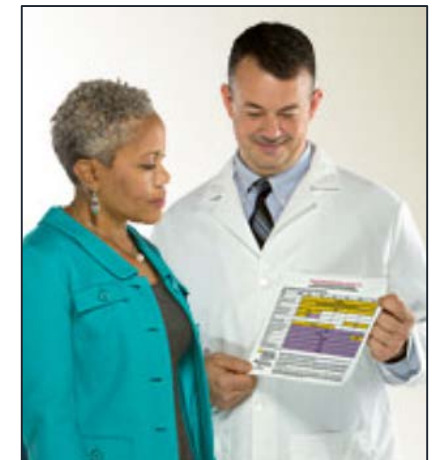
Routine immunization services remain critical

- 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.



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



Decreasing immunization rates mean it is particularly important to:

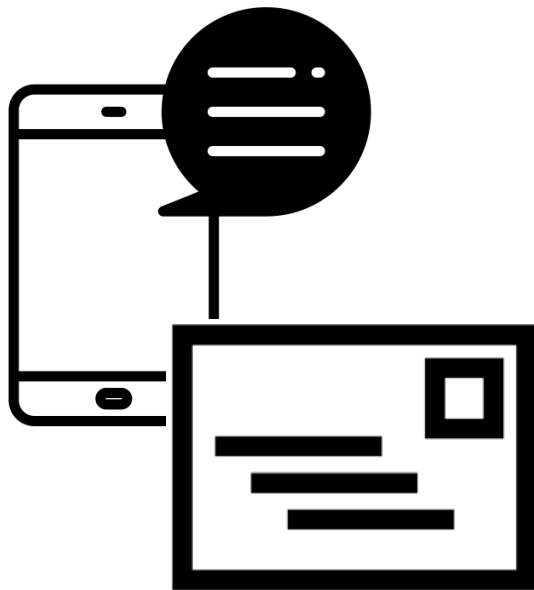
- Assess the vaccination status of all patients to avoid missed opportunities and ensure timely vaccination catch-up.
- Administer all vaccines due or overdue according to the recommended [CDC immunization schedules](https://www.cdc.gov/vaccines/imz/downloads/pdf/adult-schedule.pdf) during each visit.

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	24 mo	3-5 yrs	6-11 yrs	12-13 yrs	14-15 yrs	16 yrs	17-18 yrs	
Hepatitis B (HepB)	1 st dose	2 nd dose														
Rotavirus (RV) (2-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												
Hemophilus influenzae type b (Hib)		1 st dose	2 nd dose	See Notes												
Pneumococcal conjugate (PCV13)		1 st dose	2 nd dose	3 rd dose												
Inactivated poliovirus (IPV <18 yrs)		1 st dose	2 nd dose													
Influenza (IV)																
Influenza (IAN)																

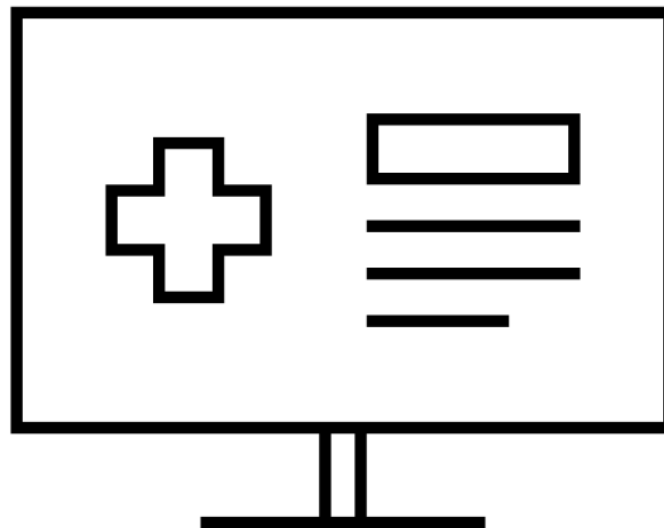
Adult Immunization Schedule (19 years and older)				
Table 1 Recommended Adult Immunization Schedule by Age Group, United States, 2020				
Vaccine	19-26 years	27-49 years	50-64 years	≥65 years
Influenza inactivated (IV) or Influenza recombinant (IRV)		1 dose annually		
Influenza live, attenuated (LAIV)		1 dose annually		
Tetanus, diphtheria, pertussis (Tdap or Td)		1 dose Tdap, then Td or Tdap booster every 10 years		
Measles, mumps, 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

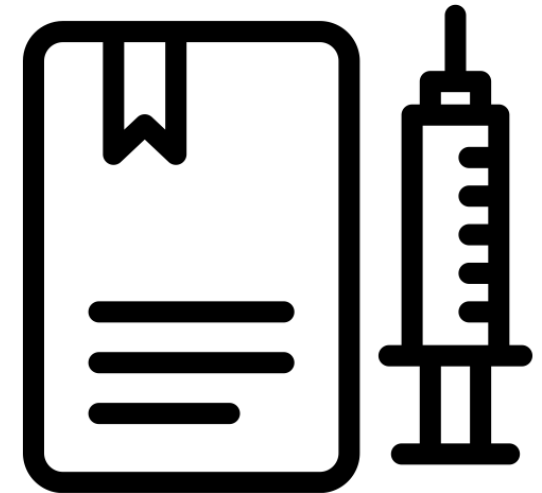
Reminder/recall systems



Forecasting through EMR or IIS



Standing orders



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.

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

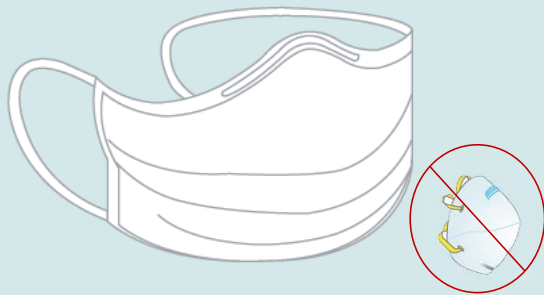
- Screen patients for COVID-19 symptoms before and during visit.
- Ensure social distancing (at least 6 feet apart, where possible).
- Limit and monitor facility points of entry and install barriers to limit physical contact with patients at triage.
- Implement policies for cloth face masks for persons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

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



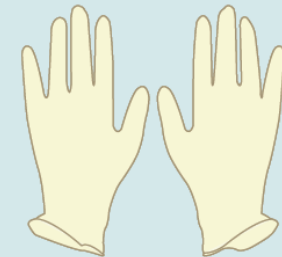
- **Recommended:** All healthcare providers
- N95 masks not recommended

Eye protection



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

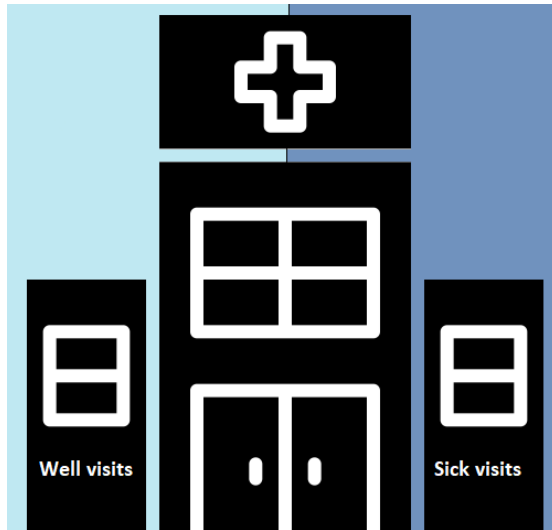
Gloves



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

Ensure physical distancing during vaccination visits

Separate sick from well patients



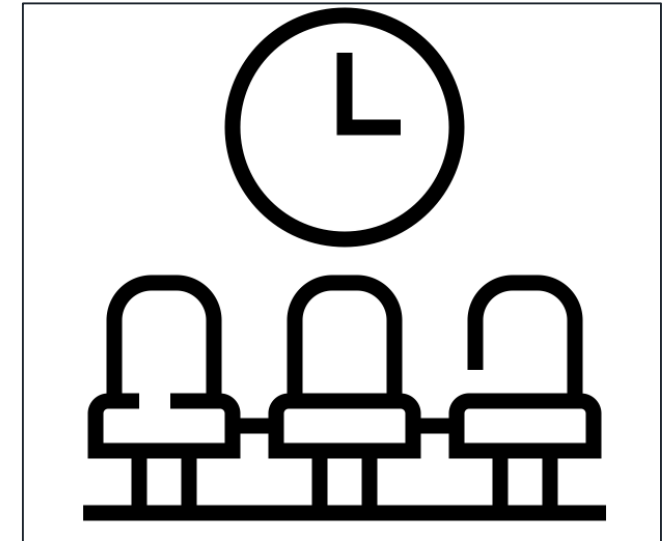
- Schedule well and sick visits at different times of the day
- Place sick visits in different areas of the facility or different locations

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

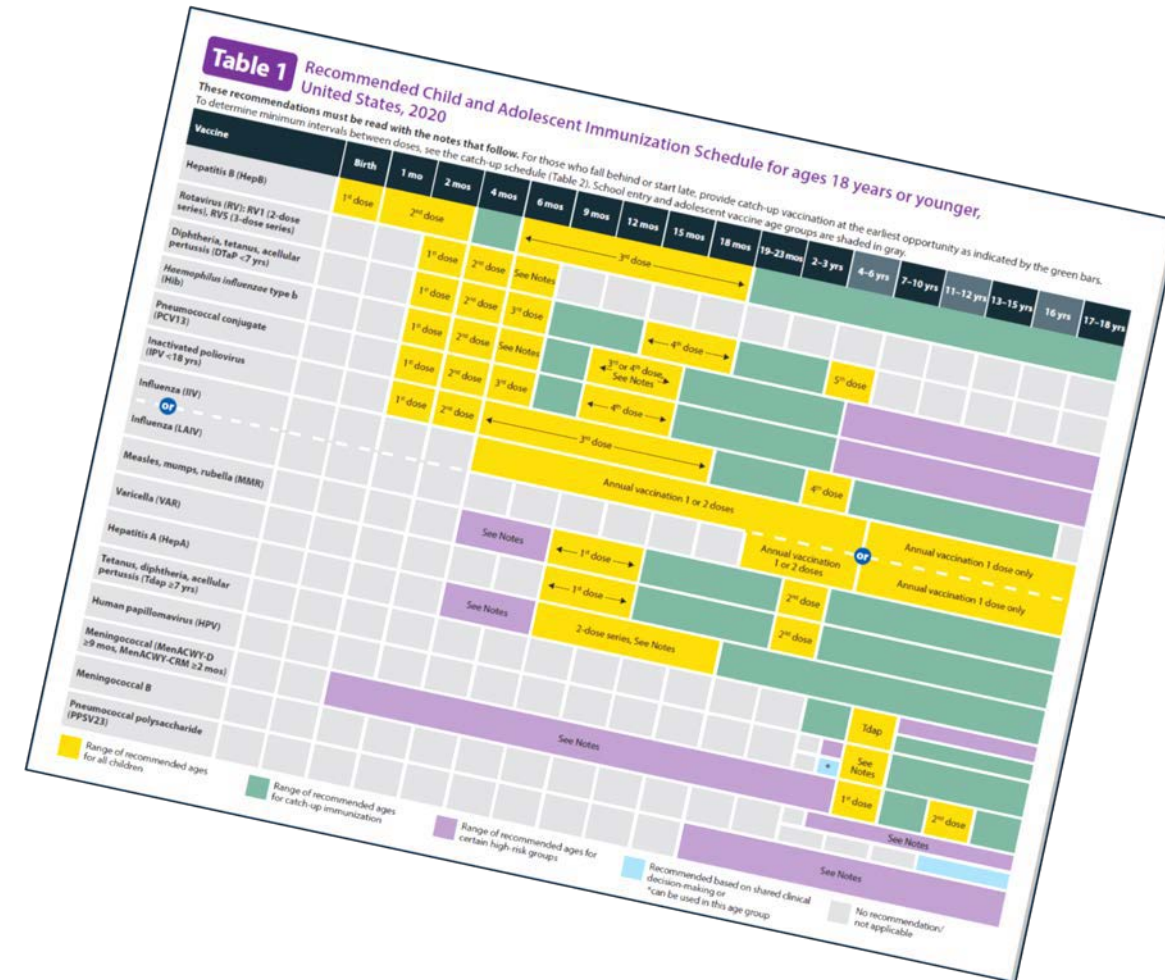
- Prior to the pandemic, ~50% of U.S. children eligible to receive free vaccines through VFC
 - More may be eligible now because of recent loss of insurance.
- Parents of recently eligible children may not be aware of VFC.
- Partners and providers can help improve vaccine access by increasing awareness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



Back-to-school vaccination

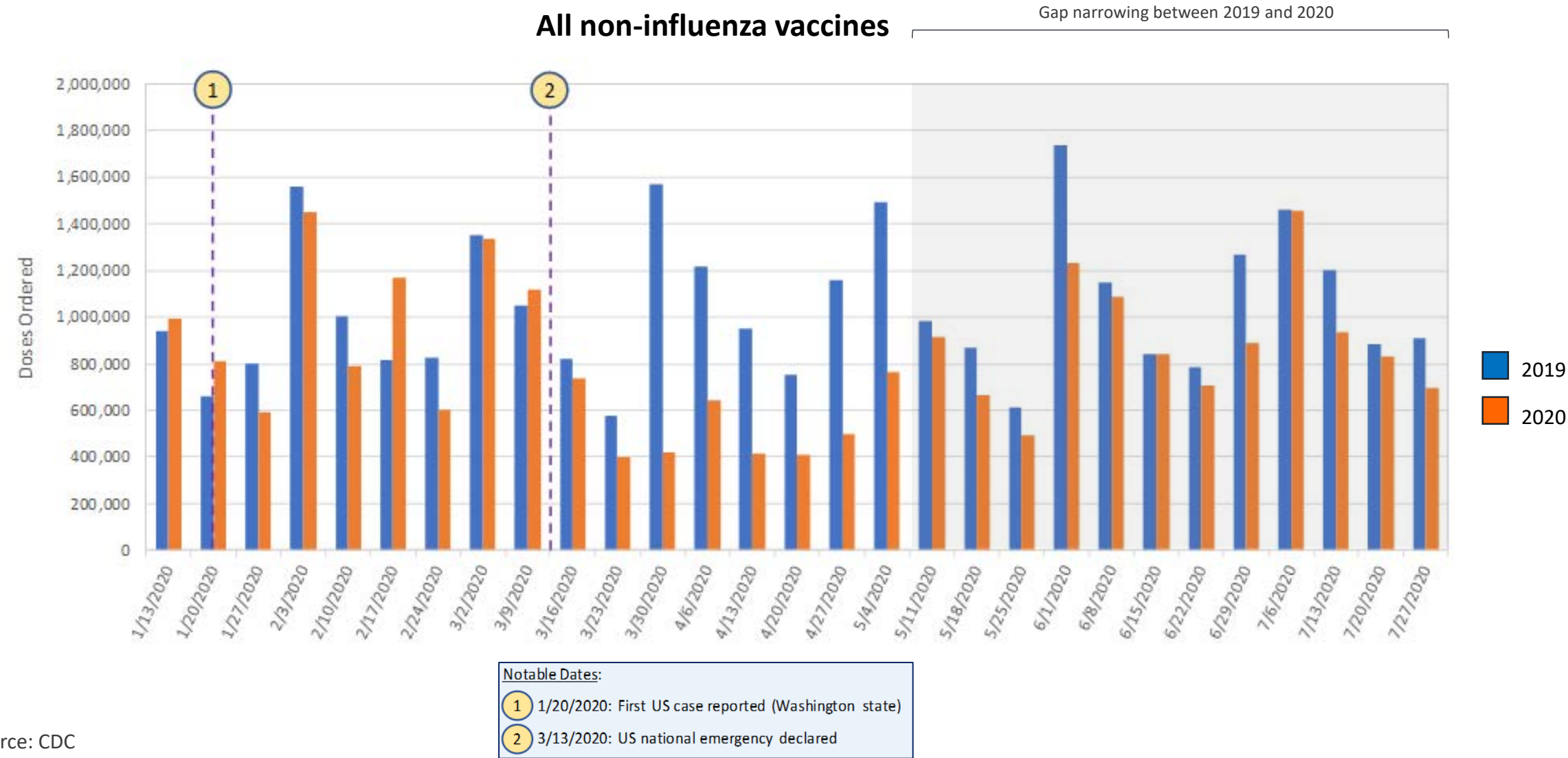
School vaccination requirements provide a critical checkpoint for children's vaccination status

- 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



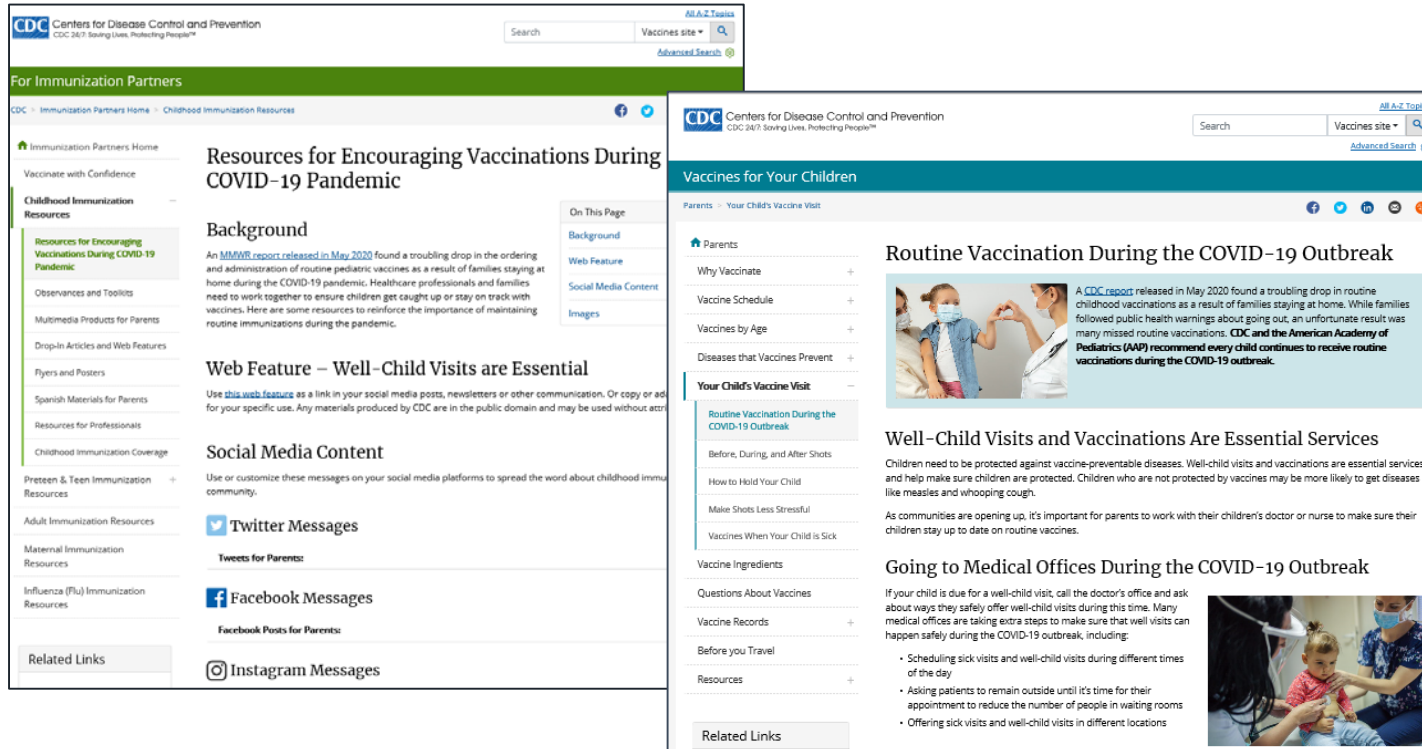
Signs of recovery in routine childhood vaccination

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

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



AAP's #CallYourPediatrician campaign

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.



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



The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.

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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



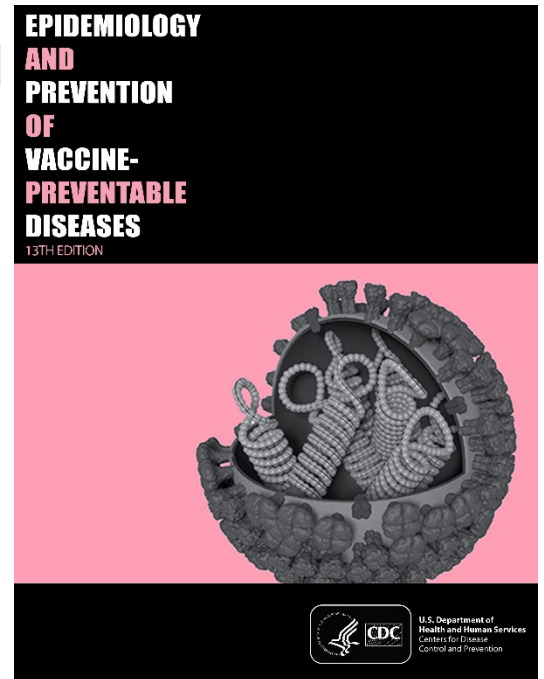
www.cdc.gov/vaccines/partners/childhood/professionals.html#presentation-10-ways

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

Immunizations and Developmental Milestones
For Your Child from Birth Through 6 Years Old

	Birth	1 MONTH	2 MONTHS	4 MONTHS	6 MONTHS
Hepatitis B	✓ HepB	✓ HepB			✓ HepB
Rubella			✓ RV	✓ RV	✓ RV
Diphtheria, Tetanus, Pertussis			✓ DTaP	✓ DTaP	✓ DTaP
Pneumococcal			✓ Hib	✓ Hib	✓ Hib
Inactivated Poliovirus			✓ IPV	✓ IPV	✓ IPV
Influenza (flu)			✓ IPV	✓ IPV	✓ IPV
Measles					✓ MMR
Whooping cough					✓ DTaP
Polio					✓ IPV
MMR					✓ MMR
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HOW VACCINES STRENGTHEN YOUR BABY'S IMMUNE SYSTEM

Your child is exposed to thousands of germs every day in his environment. This happens through the food he eats, air he breathes and things he puts in his mouth.

Babies are born with immune systems that can fight most germs, but there are some deadly diseases they can't handle. That's why they need vaccines to strengthen their immune system.

Vaccines use very small amounts of antigens to help your child's immune system recognize and learn to fight serious diseases. Antigens are parts of germs that cause the body's immune system to go to work.

30 YEARS AGO	TODAY
3,000 vaccines used	305 vaccines used
to protect against 8 diseases by age two	to protect against 14 diseases by age two

Thanks to scientific advances, today's vaccines can protect children from more diseases using fewer antigens. Vaccines contain only a tiny fraction of the antigens that babies encounter in their environment every day.

Vaccines help strengthen your baby's immune system and keep him safe from vaccine-preventable diseases.

IMMUNIZATION. POWER TO PROTECT.

U.S. Department of Health and Human Services
www.cdc.gov/vaccines/parents

Measles and the Vaccine (Shot) to Prevent It

What is measles?
Measles is a serious respiratory disease (in the lungs and breathing tubes) that causes a rash and fever. It is very contagious. In rare cases, it can be deadly.

What are the symptoms of measles?
Measles starts with a fever that can get very high. Some of the other symptoms that may occur are:
• Cough, runny nose, and red eyes
• Rash of tiny red spots that start at the head and spread to the rest of the body
• Swollen lymph nodes
• Ear infection

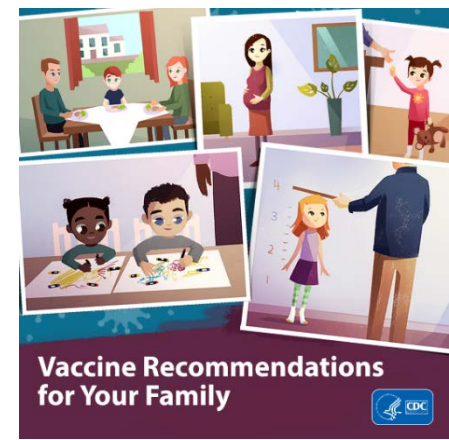
Why should my child get the MMR shot?
The MMR shot:
• Protects your child from measles, a potentially serious disease, as well as mumps and rubella.
• Prevents your child from getting an uncomfortable rash and high fever from measles.
• Keeps your child from missing school or childcare (and keeps you from missing work to care for your sick child).

Is the MMR shot safe?
Yes. The MMR shot is very safe, and it is effective at preventing measles (as well as mumps and rubella). Vaccines, like any medicines, can have side effects. But most children who get the MMR shot have no side effects.

What are the side effects?
Most children do not have any side effects from the shot. The side effects that do occur are usually very mild, such as a fever, rash, swollen or tender lymph nodes, or temporary pain and stiffness in the joints (mostly in teens and adults). More serious side effects are rare. These may include high fever that could cause a seizure.

Is there a link between the MMR shot and autism?
No. Scientists in the United States and other countries have carefully studied the MMR shot. None has found a link between autism and the MMR shot.

Doctors recommend that your child get 2 doses of the MMR shot for best protection. Your child will need one dose at each of the following ages:
• 12 through 15 months
• 4 through 6 years
Infants 6 months to 11 months old should have 1 dose of MMR shot before traveling to another country.



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](https://www.instagram.com/cdcgov)



Adolescent immunization resources



HPV Vaccine for Preteens and Teens

HPV vaccination is recommended at ages 11-12 to protect against cancers caused by HPV infection.

Why does my child need HPV vaccine?

Human papillomavirus (HPV) vaccine protects against cancers caused by HPV infection. HPV is a common virus that infects teens and adults. About 14 million people, including teens, become infected with HPV each year. HPV infection can cause cervical, vaginal, and vulvar cancers in women and penile cancer in men. HPV can also cause genital warts in both men and women.

When should my child be vaccinated?

All kids who are 11 or 12 years apart. Getting vaccinated on time. People get HPV from another person.

Some children may need three shots less than five months apart. A vaccine series on or after their 16th birthday. The vaccine is safe, effective, and easy to get. The best way to remember to get the remaining shots before you.

Is HPV vaccine safe for my child?

HPV vaccination provides safety. HPV vaccine has a reassuring. Like any vaccine or medicine, HPV vaccine may cause side effects, such as soreness or redness in the arm where the vaccine is given. Fainting after a vaccine shot is a common side effect. To prevent fainting and injuries, vaccination and remain in that position for 15 minutes after the shot. It is important to tell the doctor or nurse if your child has any allergies to latex, yeast, or chicken eggs, before they receive any vaccines.

How can I get help paying for these vaccines?

The Vaccines for Children (VFC) program, which is free for all children, regardless of insurance status. Learn more at www.cdc.gov/vaccines/imz/parents.

Where can I get my child vaccinated?

Talk to your child's doctor or nurse to learn more about HPV vaccine. You can also find out more at www.cdc.gov/vaccines/imz/parents.

Vaccines for Preteens and Teens: What Parents Should Know

All boys and girls need three vaccines at ages 11-12 to protect against serious diseases. Preteens and teens should also get a yearly flu vaccine, as well as any vaccines they missed when they were younger.

What vaccines does my child need?

- Meningococcal vaccine** protects against a type of bacteria that can cause serious illnesses. The two most common types of illnesses include infections of the lining of the brain and spinal cord (meningitis) and bloodstream. All preteens should get the meningococcal conjugate vaccine (MenACWY). Teens may also receive a serogroup B meningococcal vaccine (MenB), preferably at 16 through 18 years old.
- HPV vaccine** protects both girls and boys from future infections that can lead to certain types of cancer. Children who get their first dose on or after their 16th birthday will need three doses.
- Tdap vaccine** protects against three serious diseases: tetanus, diphtheria, and pertussis (whooping cough).
- Flu vaccine** helps protect against seasonal flu. Even healthy preteens and teens can get very sick from flu and spread it to others. The best time to get an annual flu vaccine is before flu begins causing illness in your community, ideally before the end of October. Flu vaccination is beneficial as long as flu viruses are circulating, even in January or later.

A good time to get these vaccines is during a yearly wellness check. Your child can also get these vaccines at a physical exam required for school, sports, or camp. **If your child missed any dose of recommended vaccine, ask your doctor or nurse about getting them now.**

Are these vaccines safe?

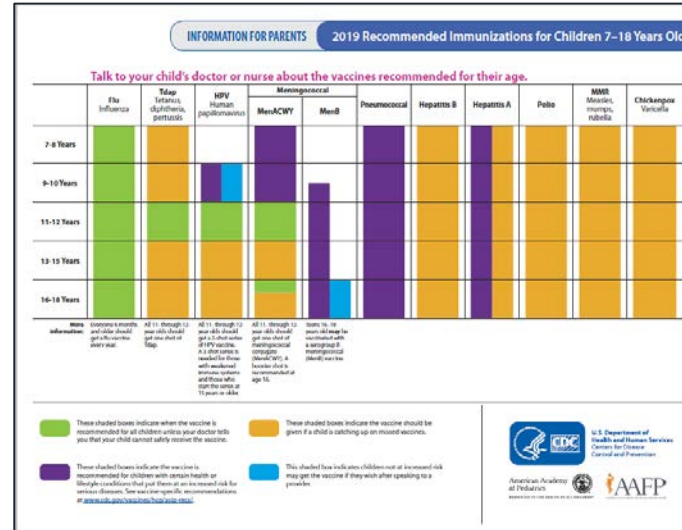
These vaccines have been studied very carefully and are very safe. They can cause mild side effects, like soreness or redness in the part of the arm where the shot is given. Some preteens or teens might faint after getting a shot. Sitting or lying down when getting a shot, and then for about 15 minutes after the shot, can help prevent fainting. Serious side effects are rare. It is very important to tell the doctor or nurse if your child has any serious allergies, including allergies to yeast, latex, or chicken eggs, before they receive any vaccines.

Can I get help paying for these vaccines?

Most health insurance plans cover routine vaccinations. The Vaccines for Children (VFC) program also provides vaccines for children 18 years and younger who are uninsured, underserved, Medicaid-eligible, American Indian, or Alaska Native. Learn more at www.cdc.gov/vaccines/imz/parents.

Talk to your child's doctor or nurse about the vaccines your child needs or visit www.cdc.gov/vaccines/parents.

Last updated: 5/27/2019





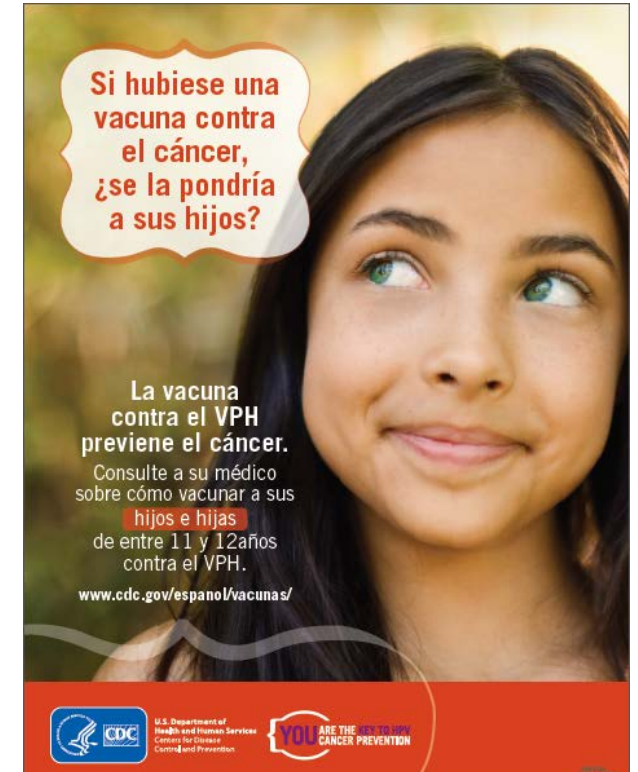
Can I Ask you a question?

with Dr. Rodríguez

Play (k)

0:03 / 0:53

HPV VACCINE IS CANCER PREVENTION



Si hubiese una vacuna contra el cáncer, ¿se la pondría a sus hijos?

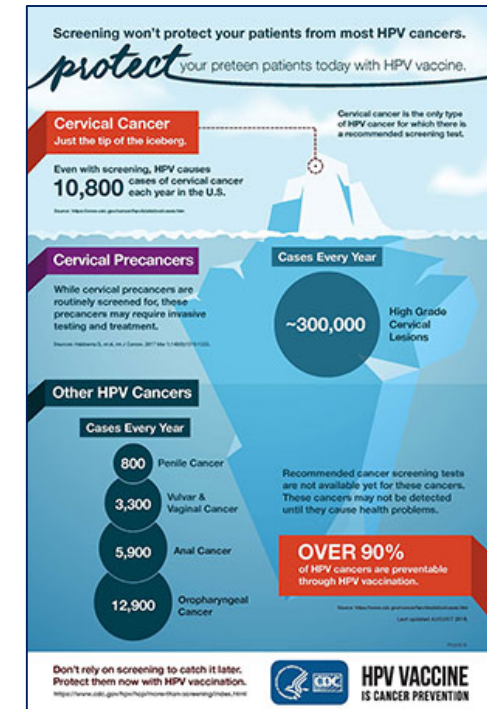
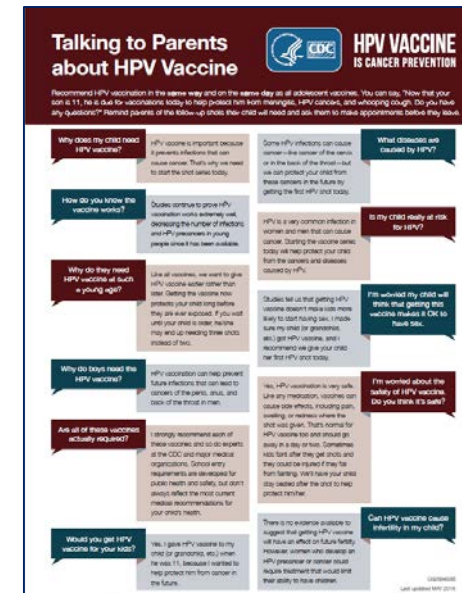
La vacuna contra el VPH previene el cáncer. Consulte a su médico sobre cómo vacunar a sus hijos e hijas de entre 11 y 12 años contra el VPH.

www.cdc.gov/espanol/vacunas/

Logos: CDC, U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, YOU ARE THE KEY TO HPV CANCER PREVENTION.

HPV vaccine resources

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



Questions?



Dr. Sarah Schillie



Jessica MacNeil

Thank You!

Webinar archive will be available at:

www.phf.org/immunization

Questions or comments?

immunization@phf.org