Centers for Disease Control and Prevention





Improving Vaccine Access and Confidence: Lessons from the US Immunization Program

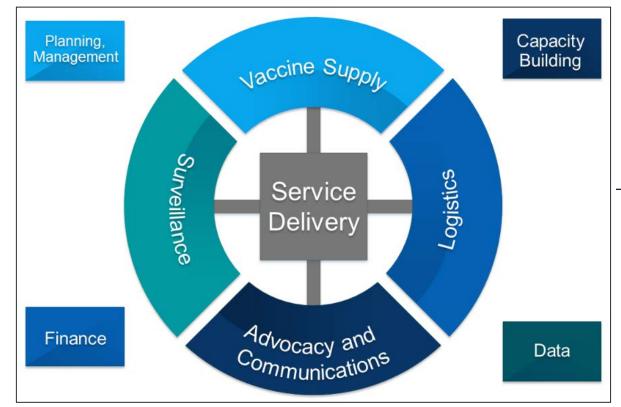
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May 28, 2020

Strong immunization program: Foundation for vaccine access and confidence

Components of U.S. Immunization Program



Whitney CG, et. al. MMWR Morb Mortal Wkly Rep. 2014;63(16): 352–355; Hill HA, et al. MMWR Morb Mortal Wkly Rep 2019;68:913–918; JAMA. 2007;298(18):2155-2163. National Notifiable Disease Surveillance System, Week 52 (2019 Provisional Data). VAERS= Vaccine Adverse Event Reporting System.

- Improved access to vaccines
 - Vaccines for Children (VFC) and other programs
- High childhood vaccine coverage
 - Nearly 99% of 2 year olds have received ≥1 vaccine
- Historically low burden of vaccinepreventable diseases overall
 - >92% reduction compared to 20th century average
 - Safe vaccine supply
 - 1 serious adverse event report in VAERS for ~137,000 non-influenza (2017) and 282,000 influenza doses (2018-2019 season) administered

Vaccines for Children (VFC) Program

- Supplies >50% vaccines for children in the United States
- By improving vaccine access, the VFC program has helped to substantially:
 - Increase vaccination coverage rates
 - Reduce incidence of preventable diseases
 - Reduce disparities in coverage



Vaccine coverage across the lifespan

Children High coverage

- >90%: primary seriescoverage by age 2 years
- >94%: school-required vaccines in kindergartners
- 64-74%: Influenza (depending on age)

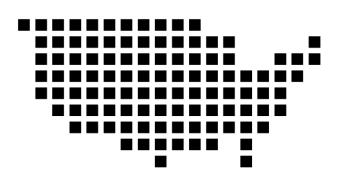
Adolescents Mixed picture

- >86%: Tdap, MenACWY
- **68%:** ≥1 HPV dose
- 52%: Influenza

Adults Suboptimal coverage

- 60-64%: routinely
 recommended vaccines
- 54-55%: maternal influenza, Tdap
- 35-68%: Influenza (depending on age)

Geographic and socioeconomic disparities persist







Poverty,
Insurance status

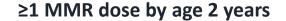


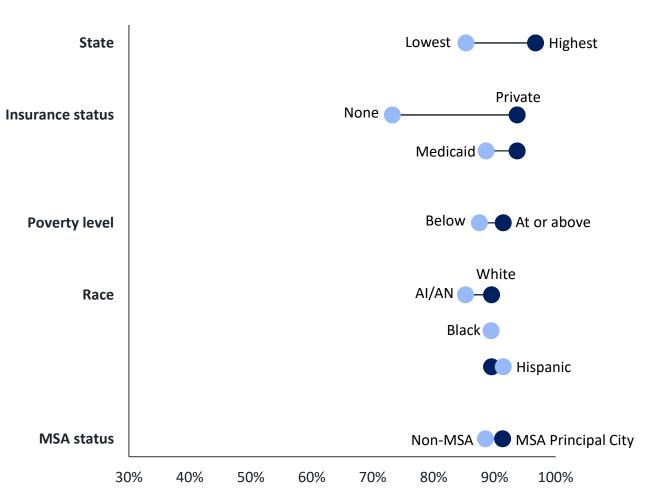
Race/ethnicity



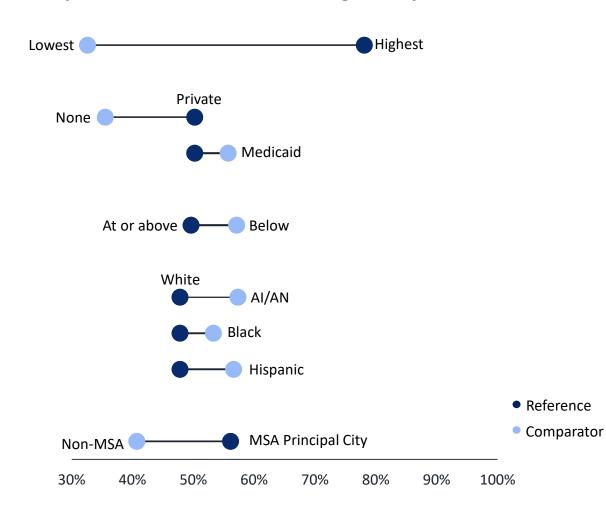
Rural areas

Differences in disparities



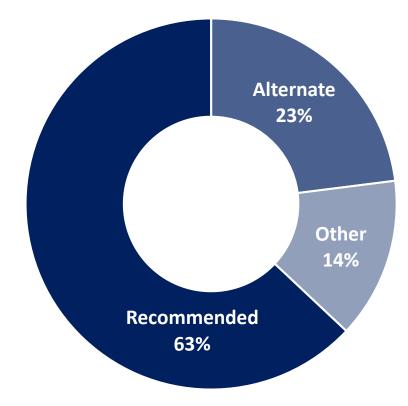


Up to date on HPV vaccine among 13-17 year olds



Timely vaccination and disparities

- Nearly two-thirds of young children vaccinated according to recommended schedule
 - More likely to be up to date on all vaccines
- Socioeconomic disparities in adherence to schedule
 - Poverty level, receipt of WIC benefits, maternal education
- Children without insurance 9 times more likely to have received no vaccines by age 2 years



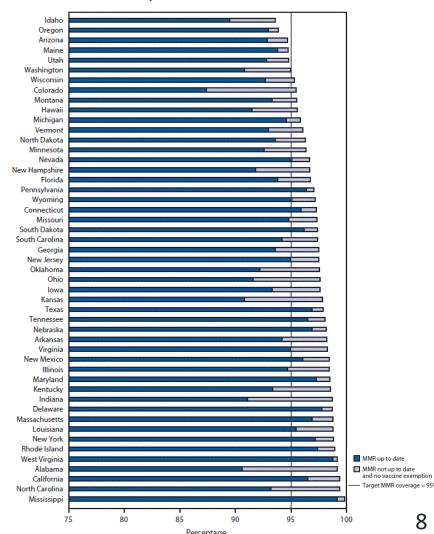
Vaccination schedule pattern by age 19 months

School vaccination requirements provide safety net to protect students MMR coverage if all kindergartners v

 2.5% of kindergartners have a vaccine exemption (state range: 0.1-7.7%)

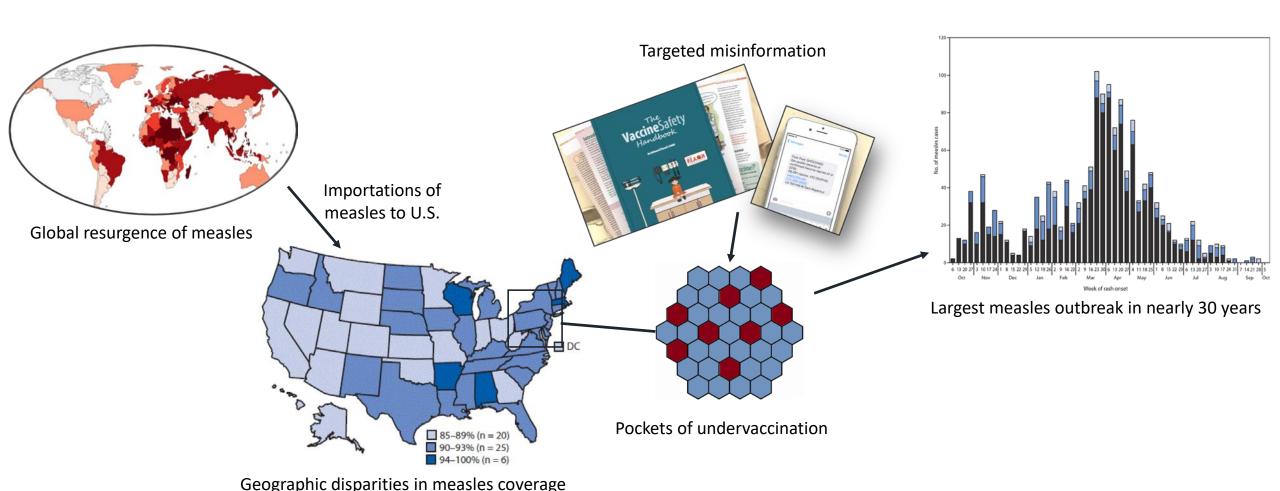
 2% attend school within grace period or provisionally enrolled (state range: 0.2-6.7%)

Most states could achieve ≥95% MMR coverage if non-exempt students were fully vaccinated MMR coverage if all kindergartners without an exemption were vaccinated



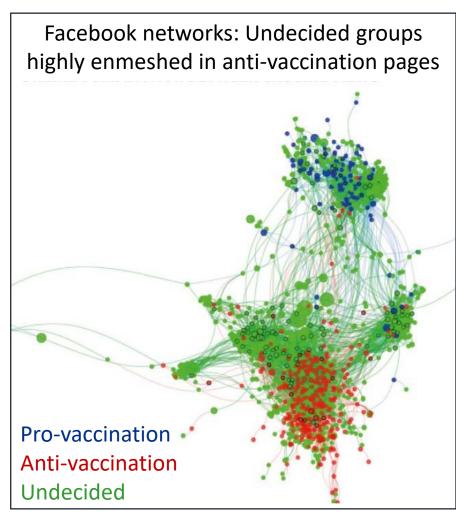
High coverage needed in all communities to protect against vaccine-preventable diseases

Lessons from the 2018-2019 measles outbreak in New York



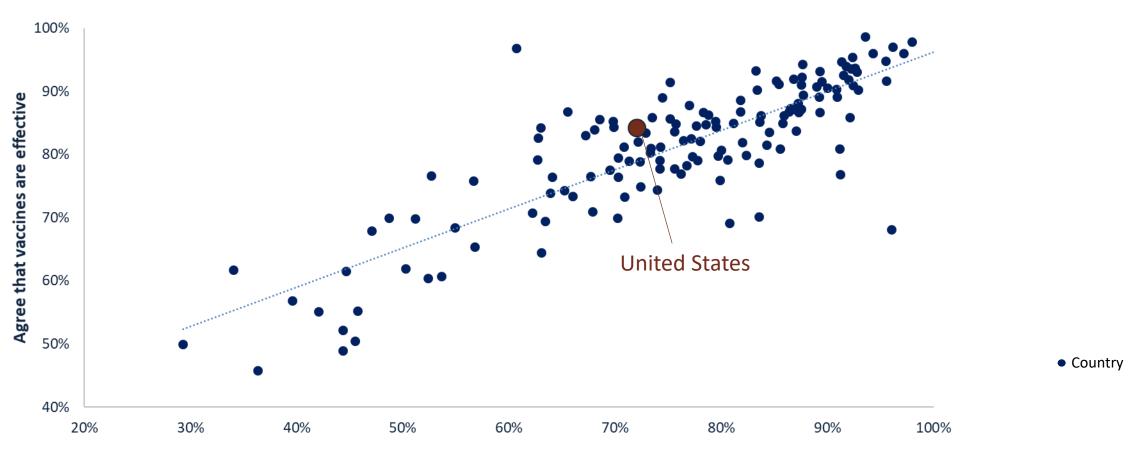
Challenges of vaccine myths and misinformation

- Contributor to 2018-19 measles and other recent outbreaks
 - Targeted and tailored towards specific communities
- Rapid dissemination and sophistication of misinformation presenting new challenges
- Social media and other online networks a factor



Vaccine confidence: A global issue

Perceptions about the safety and effectiveness of vaccines by country



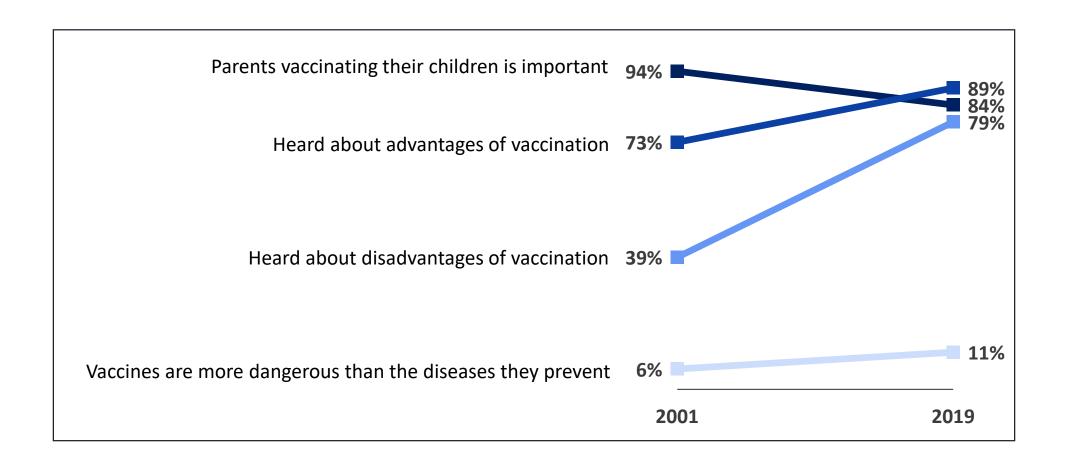
Agree that vaccines are safe

Persons responding that they somewhat or strongly agree with the statements that vaccines are safe and effective.

Source: Gallup (2019) Wellcome Global Monitor – First Wave Findings. https://wellcome.ac.uk/sites/default/files/wellcome-global-monitor-2018.pdf

Most Americans have positive vaccine views

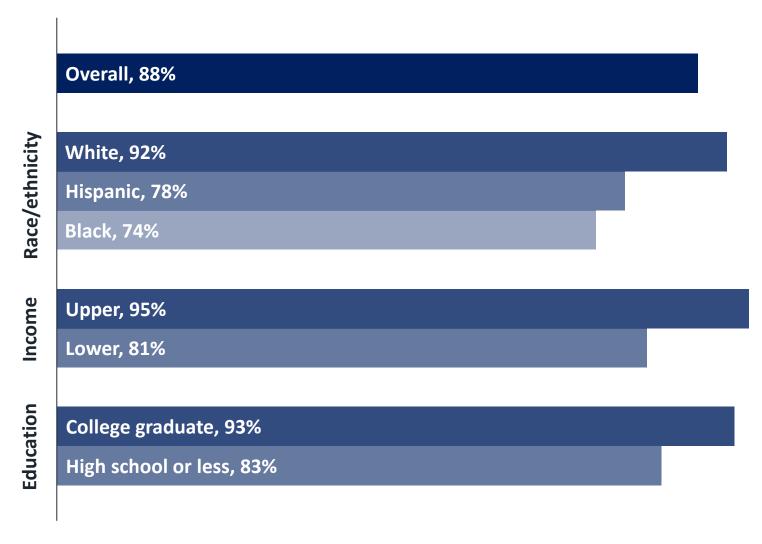
Complacency and vaccine concerns increasing



Source: Gallup, Inc. 2019

Vaccine skepticism higher in certain groups

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



Why are some parents hesitant to vaccinate?

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



Health care providers: Still the most trusted source of vaccine information

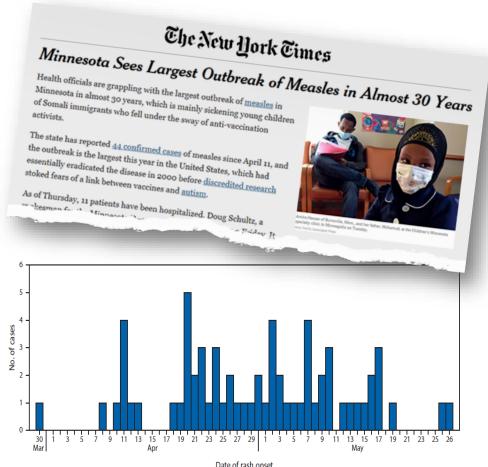


- 93% of parents say their child's doctor is their most trusted source of vaccine information
- Reassurance or information from a healthcare provider is leading reason that hesitant parents change their mind to vaccine acceptance

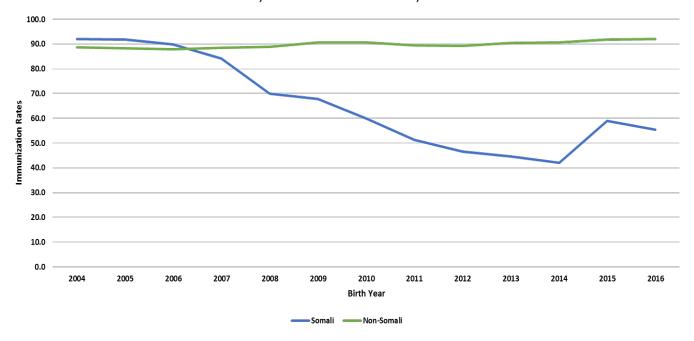


Maintaining vaccine confidence: an ongoing process

Lessons from the 2017 measles outbreak in Minnesota – two steps forward, one step back



Comparison of MMR rates at 24 months in children of Somali descent versus non Somali, Birth Years 2004-2016, Minnesota

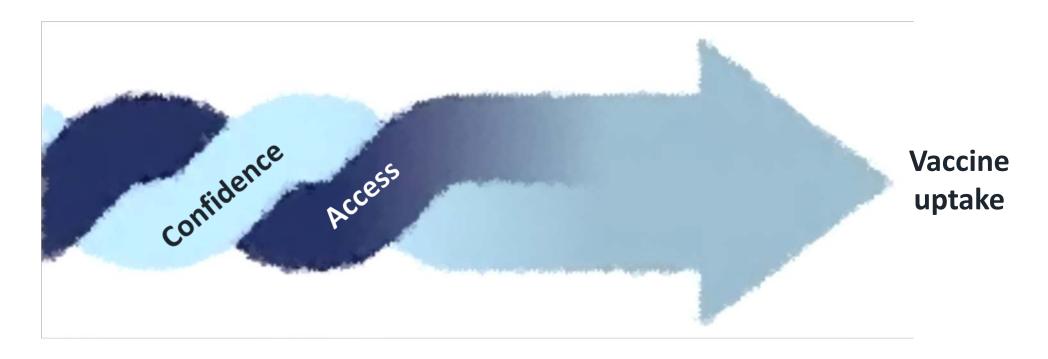


Hall V, et al. MMWR Morb Mortal Wkly Rep 2017;66:713–717.

Improving vaccine coverage in the United States

Issues of vaccine access and confidence are intertwined

To improve coverage, must strengthen both



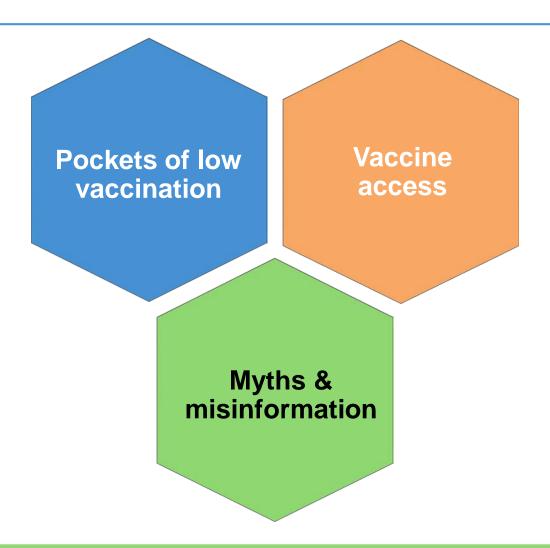
Although we have made progress, more is needed...

where do we go from here?



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





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

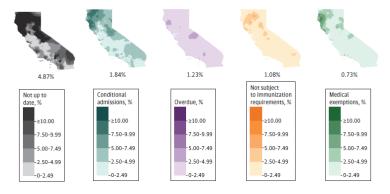
Use local partners and trusted messengers, establish new partnerships to contain the spread of misinformation, and educate critical stakeholders about vaccines

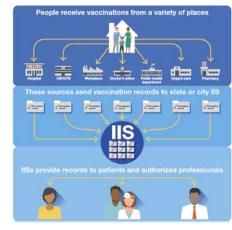
Protect communities

Strategy: Protect communities at risk from under-vaccination

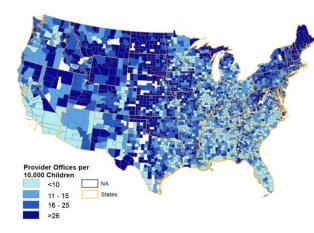
- Leverage immunization data to find and respond to communities at risk
- ✓ Work with trusted local partners to reach at-risk communities before outbreaks
- Ensure vaccines are available, affordable, and easy-to-get in every community

Find pockets of undervaccination





Strengthen IIS and other systems for assessing coverage



Improve access to VFC for eligible children

Empower families

Strategy: Get providers and parents effective information resources

- Expand resources for health care 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



Early vaccine conversations



Resources for parents

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

Priorities for 2020



Picture courtesy of AAP and SELF Magazine.

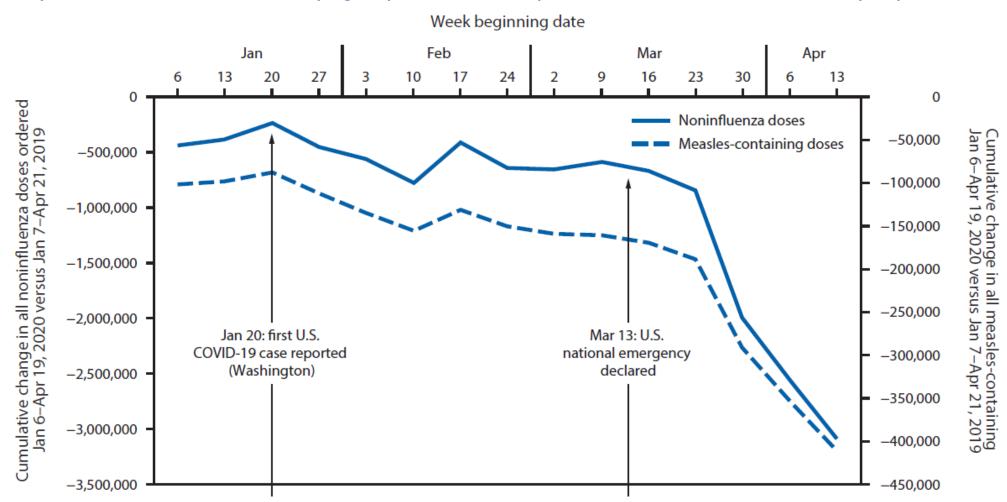
- Leverage diverse data sources to find and protect communities at risk
- Expand resources for working with communities
- Build and foster a culture of immunization in health care practices
- Technical assistance to funded partners
- Strengthen communication strategies
- Further invest in our vital partners

Strengthening vaccine access and confidence

More important than ever

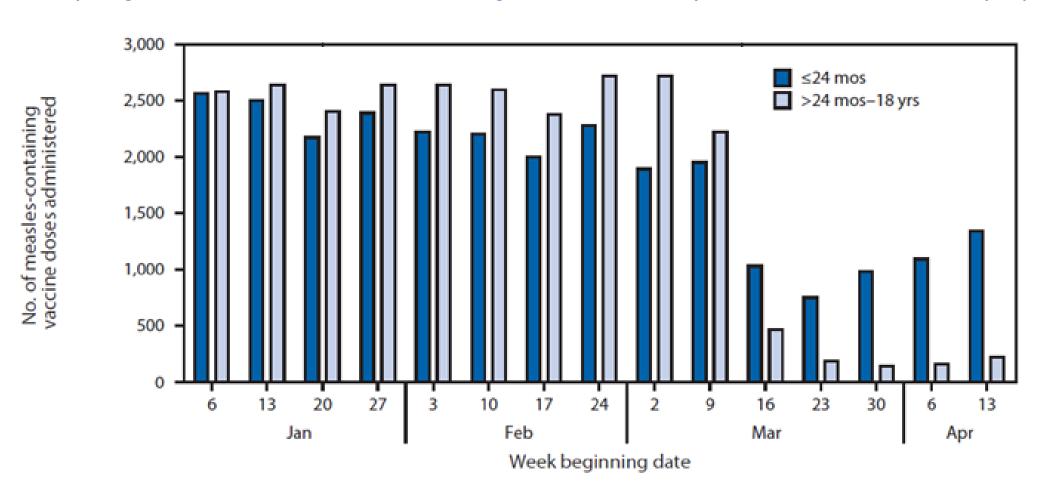
COVID-19 pandemic and disruptions to routine childhood vaccination

Weekly decreases in Vaccines for Children program provider orders for pediatric vaccines – United States, January 6-April 19, 2020



Growing cohort of measles-susceptible children

Weekly changes in doses administered for measles-containing vaccines – Vaccine Safety Datalink sites, United States, January 6-April 19, 2020



Santoli JM et al, MMWR (May 8, 2020)

Ensuring children stay up to date with routine immunizations during COVID-19 pandemic

- Providing guidance on safe delivery of vaccines during pandemic
- Supporting reminder/recall systems to promote catch-up vaccination
- Disseminating information on VFC program for families who have recently lost insurance coverage.
- Exploring policy interventions to support health care providers, especially small practices
- Disseminating messages about the importance of well-child visits and recommended vaccines during the COVID-19 pandemic



Preparing for future COVID-19 vaccines

- Identifying priority groups for vaccination
- Strengthening implementation and distribution networks
- Developing plans for monitoring and assessment, including for safety
- Understanding public perceptions and developing communications messages

Thank you

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



Picture courtesy of AAP and SELF Magazine

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