philadelphia immunization coalition

Department of Public Health
CITY OF PHILADELPHIA

PHILADELPHIA IMMUNIZATION COALITION SPRING 2022 CONFERENCE

May 11, 2022
Philadelphia College of Physicians

AGENDA

Welcome Introduction ……9:15am-9:25am

Motivational Welcome……..9:25am-9:40am

Philadelphia's COVID Vaccine Journey and Looking Forward…….. 9:40am-10:10am

10 Minute Break ……..…….10:10am–10:20am

Why Meningitis B Vaccine Matters……10:20am-11:00am

Vaccines and Schools: Looking Back to Look Forward…… 11:00am-12:00pm

Lunch …….……. 12:00pm – 1:00pm

Re-establishing Vaccine Coverage Post COVID-19 …… 1:00pm-1:30pm

Stories from the Frontlines …… 1:30pm-2:00pm

Vaccine Equity: Panel …… 2:00pm-3:00pm

Closing Remarks ……. 3:00pm-3:30pm

Motivational Welcome

Dr. Cheryl Bettigole, MD, MPH
Health Commissioner
Philadelphia Department of Public Health

CONGRATULATIONS

- Dr. Ala Stanford was appointed as the Region 3 HHS Regional Director, a key role in the Department of Health and Human Services (HHS)

- The region includes Delaware, Maryland, Pennsylvania, Virginia, West Virginia, and the District of Columbia.

Philadelphia's COVID-19 Vaccine Journey and Looking Forward

Amber Tirmal, MPH
Immunization Program Manager
Division of Disease Control
Philadelphia Department of Public Health

PDPH – COVID-19 Vaccine Response

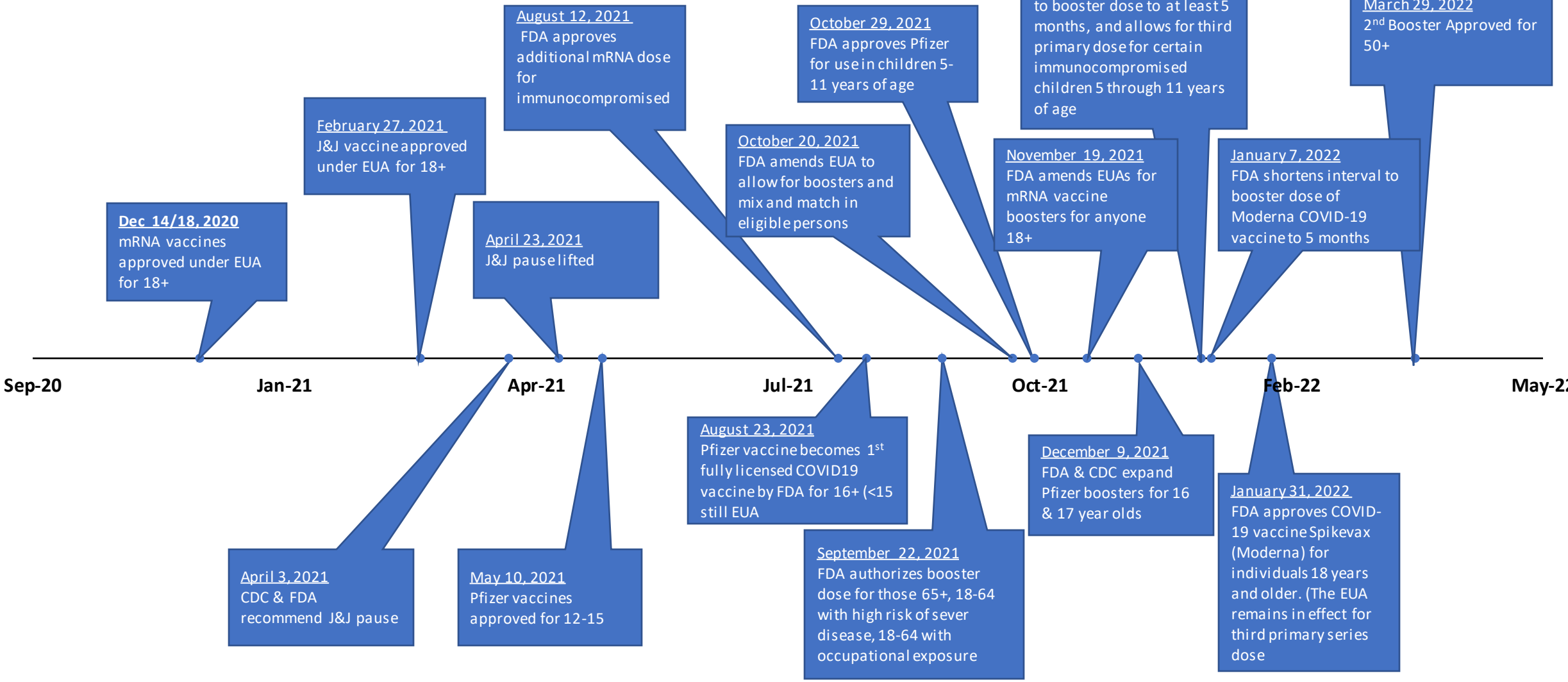
The Tale of Vaccinating our City

Department of Public Health
CITY OF PHILADELPHIA

What we Accomplished

- Timeline
- By the Numbers
- Data Collection
- Communications Materials
- FEMA Clinics
- Community Vaccine Clinics
- Pop-Up Clinics
- Mobile Teams
- Microsites
- Homebound Program
- Matchmaking Program
- Homeless Outreach Team
- What Comes Next?

Timeline

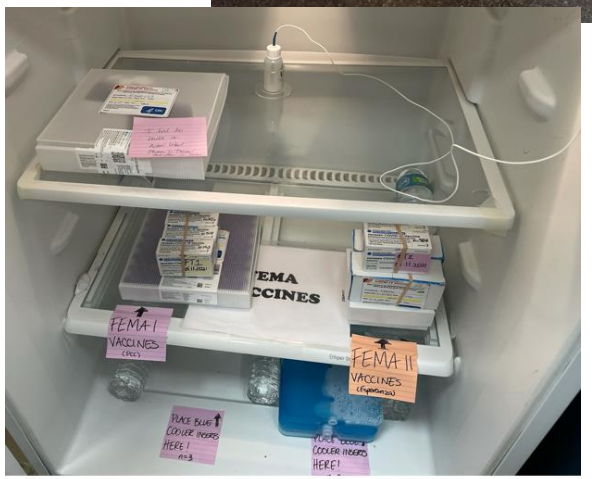

Dec 14/18, 2020
mRNA vaccines approved under EUA for 18+
February 27, 2021
J&J vaccine approved under EUA for 18+
April 23, 2021
J&J pause lifted
August 12, 2021
FDA approves additional mRNA dose for immunocompromised
October 20, 2021
FDA amends EUA to allow for boosters and mix and match in eligible persons
October 29, 2021
FDA approves Pfizer for use in children 5-11 years of age
November 19, 2021
FDA amends EUAs for mRNA vaccine boosters for anyone 18+
January 3, 2022
FDA amends EUA Pfizer-BioNTech vaccine - expands use of a single booster dose to include 12 through 15 years of age, shortens time to booster dose to at least 5 months, and allows for third primary dose for certain immunocompromised children 5 through 11 years of age
January 7, 2022
FDA shortens interval to booster dose of Moderna COVID-19 vaccine to 5 months
March 29, 2022
2nd Booster Approved for 50+
Sep-20
Jan-21
Apr-21
Jul-21
Oct-21
Feb-22
May-22
April 3, 2021
CDC & FDA recommend J&J pause
May 10, 2021
Pfizer vaccines approved for 12-15
August 23, 2021
Pfizer vaccine becomes 1st fully licensed COVID19 vaccine by FDA for 16+ (<15 still EUA
September 22, 2021
FDA authorizes booster dose for those 65+, 18-64 with high risk of sever disease, 18-64 with occupational exposure
December 9, 2021
FDA & CDC expand Pfizer boosters for 16 & 17 year olds
January 31, 2022
FDA approves COVID-19 vaccine Spikevax (Moderna) for individuals 18 years and older. (The EUA remains in effect for third primary series dose

COVID19 Vaccine Distribution Program by the Numbers

- 273 sites enrolled in the program
- 63 sites visited for quality assurance visit
- 12 additional site visits to enroll sites
- 123 sites trained on VAERS reporting

COVID19 Vaccine Distribution Program by the Numbers

- Over 200 digital data loggers have been loaned out since July of 2021
- Over 139 coolers have been loaned out to distribute COVID vaccine
- Trained over 150 individuals on storage and handling
- Responded to more than 144 different temperature excursions



COVID19 Vaccine Distribution Program by the Numbers

- 34 staff persons hired in the Immunization Program to assist with the COVID19 vaccine response
- As of 5/6/2022: 3,232,311 doses of COVID19 vaccine have been administered
- Over 1.2 million Philadelphia residents are fully vaccinated

COVID19 Vaccine Distribution Program by the Numbers

- PDPH developed a system to deliver smaller quantities of vaccines to COVID-19 providers

- Total doses delivered to providers in Philadelphia by PDPH
  - Pfizer 12+ - 122,118
  - Pfizer 5-11 - 10,440
  - Moderna - 22,560
  - Janssen – 8,775

Vaccine Supplies Distributed

Surgical Masks	Gloves	Syringes	Needles	Combos	Alcohol Wipes	Band-Aids
5,250	9,200	1,000	6,000	21,000	10,800	15,000

Data Collection: CDC Requirements

- All COVID vaccinations are reported to PhilaVax (Immunization Registry) within 72 hours of administration
- During the early part of the vaccine campaign nearly 45% of the doses administered were captured via electronic files
- A new challenge for us as HL7 data is 80-85% of all data reported annually to us
- Data from electronic files were processed individually by the PhilaVax team within 24-72hrs to meet the CDC reporting requirements

Data Collection: PrepMod

- PrepMod was new system leveraged by PDPH for the vaccination campaign
- Residents could schedule a vaccination appointment via PrepMod
- Vaccination data for PDPH managed clinics are captured within the system
- Data captured in PrepMod requires nightly transfer to PhilaVax to report administration data to CDC

Communications Materials

The COVID-19 Vaccine is

Prenatal Care

The COVID-19 vaccine is recommended for all pregnant and breastfeeding people. Pregnant people are more likely to get severely sick from the COVID-19 virus. Getting your COVID-19 vaccine protects you, and your baby!

Get your COVID-19 vaccine today!

SCAN HERE!

¡Recibir una vacuna contra el COVID-19 es como...

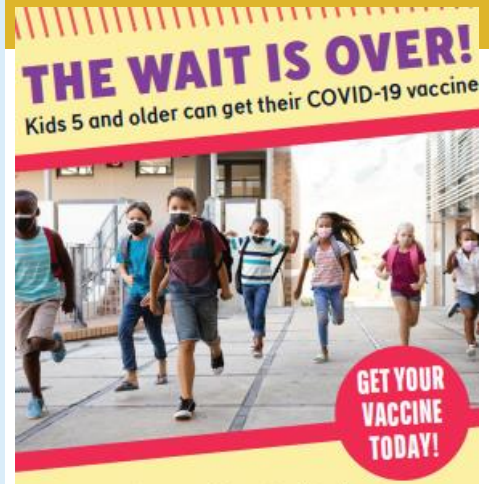
usar un paraguas en la lluvia!

Estar completamente vacunado ayudará a mantener a la mayoría de las personas a salvo de enfermarse gravemente por el virus del COVID-19. **¡Pero recibir todas las dosis de refuerzo recomendadas brinda una protección completa, al igual que cuando tiene su abrigo de lluvia y paraguas bajo la lluvia!**

¡Protéjase a sí mismo y a los demás en su comunidad al mantenerse al día con sus vacunas contra el COVID-19!

Con vacunación completa

Con vacunación completa y dosis de refuerzo



The Food and Drug Administration (FDA) has issued an Emergency Use Authorization (EUA) to Pfizer's new COVID-19 vaccine formula for children 5 to 11 years of age! Getting 5 to 11 year old children vaccinated now will help make sure fewer kids get sick from COVID-19 and will slow the spread of the virus to help protect us all!

WHERE CAN I GET A COVID-19 VACCINE FOR MY CHILD?

5 to 11 year old children can receive a COVID-19 vaccine at a pediatrician's office or manylocations that provide adult COVID-19 vaccine. (We recommend contacting the location

ear old

COVID-19 Vaccine Schedule for People Who are NOT Moderately or Severely Immunocompromised

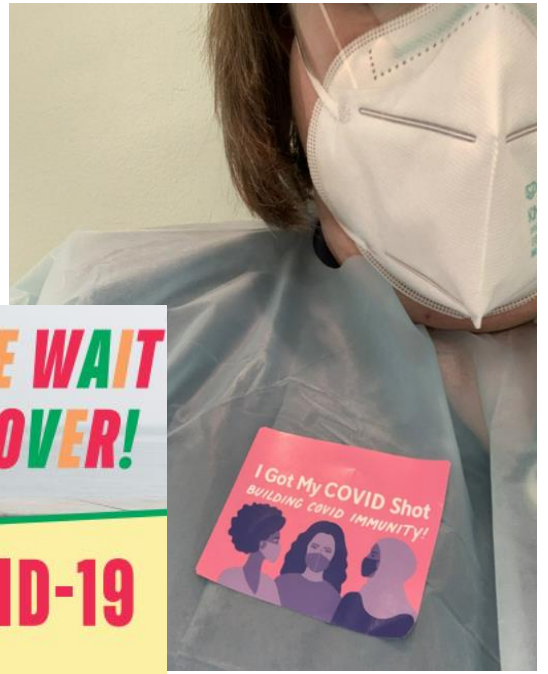
Use the flowchart below to help determine if and when you need your next dose of COVID-19 vaccine. Ready to get vaccinated or have questions about the COVID-19 vaccines? Visit **www.phila.gov/vaccine**, email **COVID@phila.gov**, call **215-685-5488**, or talk to your doctor or pharmacist!

Pfizer-BioNTech (ages 5-11 years)	Pfizer-BioNTech (ages 12 years and older)	Moderna (ages 18 years and older)	Janssen (ages 18 years and older)
1st dose	1st dose	1st dose	1st dose
2nd dose* (3 weeks after 1st dose)	2nd dose* (3-8 weeks after 1st dose)	2nd dose* (4-8 weeks after 1st dose)	Booster dose** (at least 2 months after 1st dose)
	Booster dose** (at least 5 months after 2nd dose)	Booster dose** (at least 5 months after 2nd dose)	

THE WAIT IS OVER!

GET YOUR COVID-19 SHOT TODAY!

As the COVID-19 vaccine becomes more available, we're one step closer to hanging out, having fun, and most importnatly, being safe. **Everyone 12 years of age and older can get their COVID-19 vaccine by making an appointment with their doctor or local health center.** Learn more about the COVID-19 vaccine by emailing covidvax@phila.gov, calling 311, or visiting www.phila.gov/covid.



Getting a COVID-19 vaccine is like...

Public Health CITY OF PHILADELPHIA

using an umbrella in the rain!

A complete series of COVID-19 vaccine will help keep most people safe from getting sick from the COVID-19 virus.
But some individuals at higher risk may need a booster dose to give them extra protection.

Not vaccinated

Fully vaccinated

Fully vaccinated with booster dose

Department of Public Health
CITY OF PHILADELPHIA

Communications Materials: We Can Do This

FEMA Sites

- 2 large FEMA sites: Convention Center and Esperanza
- Convention Center: 2/28/2021 through 6/20/2021
- Administered 332,429 doses
- Esperanza: 4/7/2021 through 6/20/2021
- Administered 23,051 doses

Community Vaccine Clinics (CVC)

- CVCs had the central purpose of making the vaccine program available to high-risk persons in under-vaccinated neighborhoods with few or no vaccine providers.
- PDPH ran approximately 272 Community Clinics at 27 unique locations throughout the City
- Administered 37,557 doses through these clinics
- CVCs operated February 2021 - April 2022

Pop-Up Clinics

- Pop-up clinics were operated by PDPH, Philadelphia Fire Department (PFD) and Office of Emergency Management (OEM).
- Pop-up clinics were deployed to both indoor and outdoor spaces (PFD).
- The flexibility of the pop-up clinic model allowed the city to bring services to the communities where larger clinics were not feasible
- PDPH in collaboration with partners ran 113 clinics in 61 unique locations
- Administered 4,765 doses through pop-up events
- Pop-up clinics operated January 2021 – April 2022

Mobile Teams

- These mobile vaccination resources are used to target the staff and residents at high-risk healthcare settings, such as behavioral health hospitals and congregate facilities.
- Includes personal care homes, assisted living facilities, behavioral health facilities, group homes, and shelters
- PDPH has run 224 clinics in 91 unique locations (and counting)
- Administered 10,382 doses
- Operated 12/2020 to present (clinics are ongoing)

Microsites

- Microsites—small vaccination clinics that operate on a recurring basis (once per week) at trusted sites in low vaccination neighborhoods in conjunction with partners.

- PDPH has operated 328 clinics in 17 unique locations

- Administered 3,489 doses

- Operated May 2021 to present (clinics are ongoing)

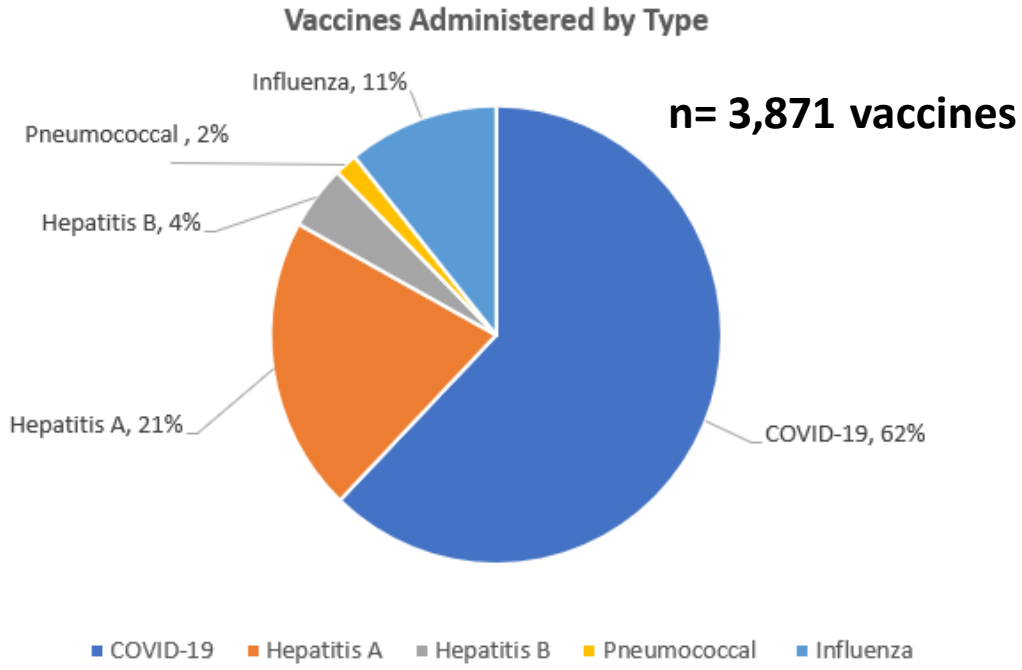
Homebound Program

- PDPH created the Homebound Vaccination Referral Program
- Program was initially intended for people who are homebound or for whom it would be difficult to be vaccinated at a clinic due to a disability
- PDPH refers persons enrolled in the registry to vaccine providers that have signed a data sharing MOU with the City
- 2,374 referrals have been made to vaccine providers (as of April)
- Expanded program in December to offer in-home vaccinations to persons who may be unable to travel to vaccine clinics due to other barriers, such as transportation

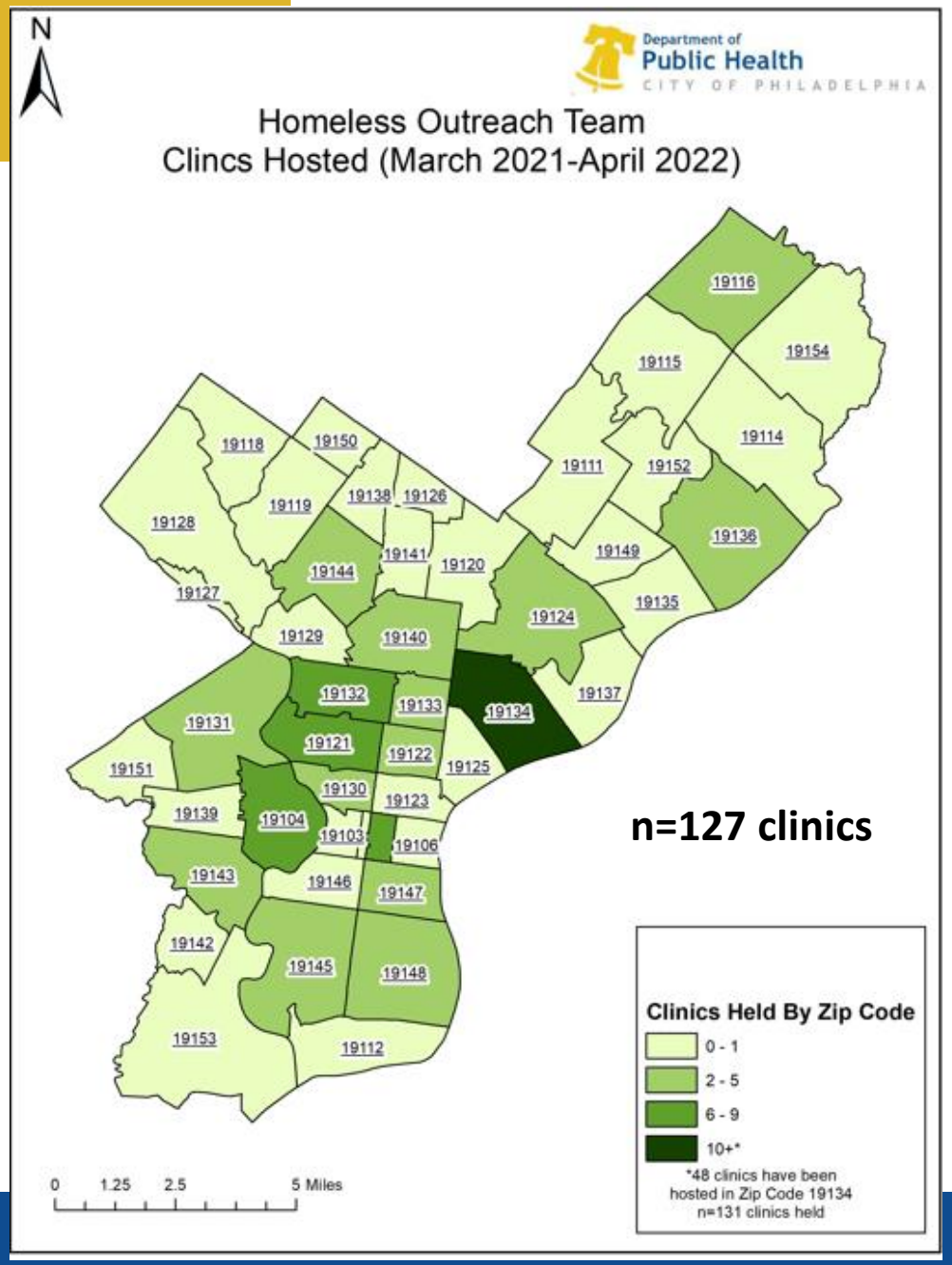
Matchmaking Program

- Matchmaking program was developed to help partner community-based organizations with COVID-19 vaccine providers to host vaccine events
- Community-based organizations complete a survey and PDPH connects them with local pharmacies, FQHCs, and doctors' offices
- Number of COVID-19 providers participating in the program: 69
- Number of matches requested: 297
- Number of events that were successfully matched: 143

Homeless Outreach Team

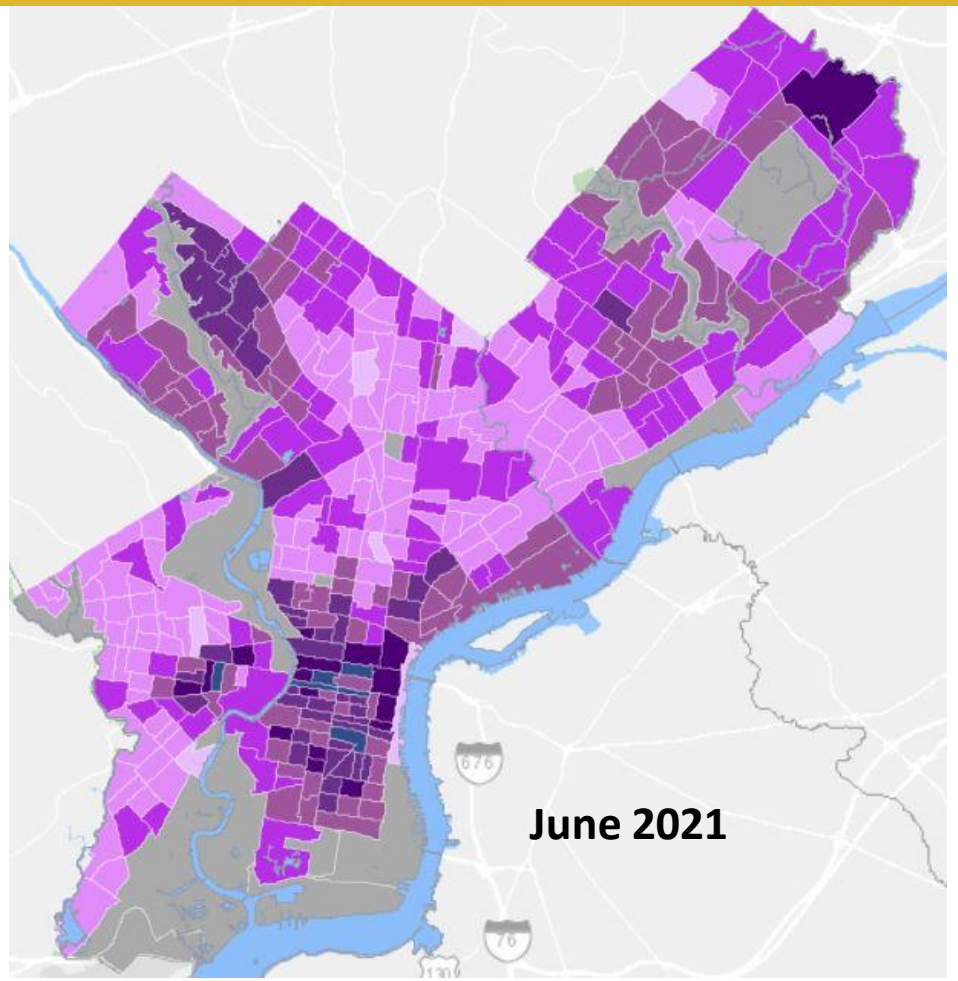


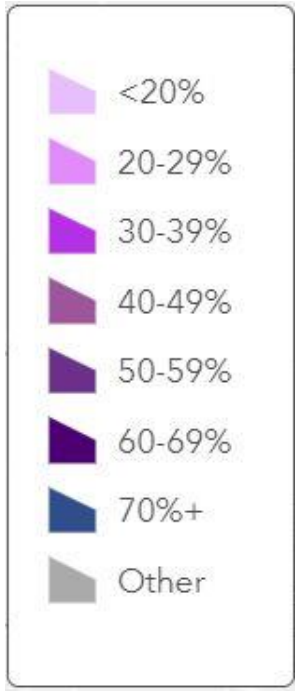
n= 3,871 vaccines

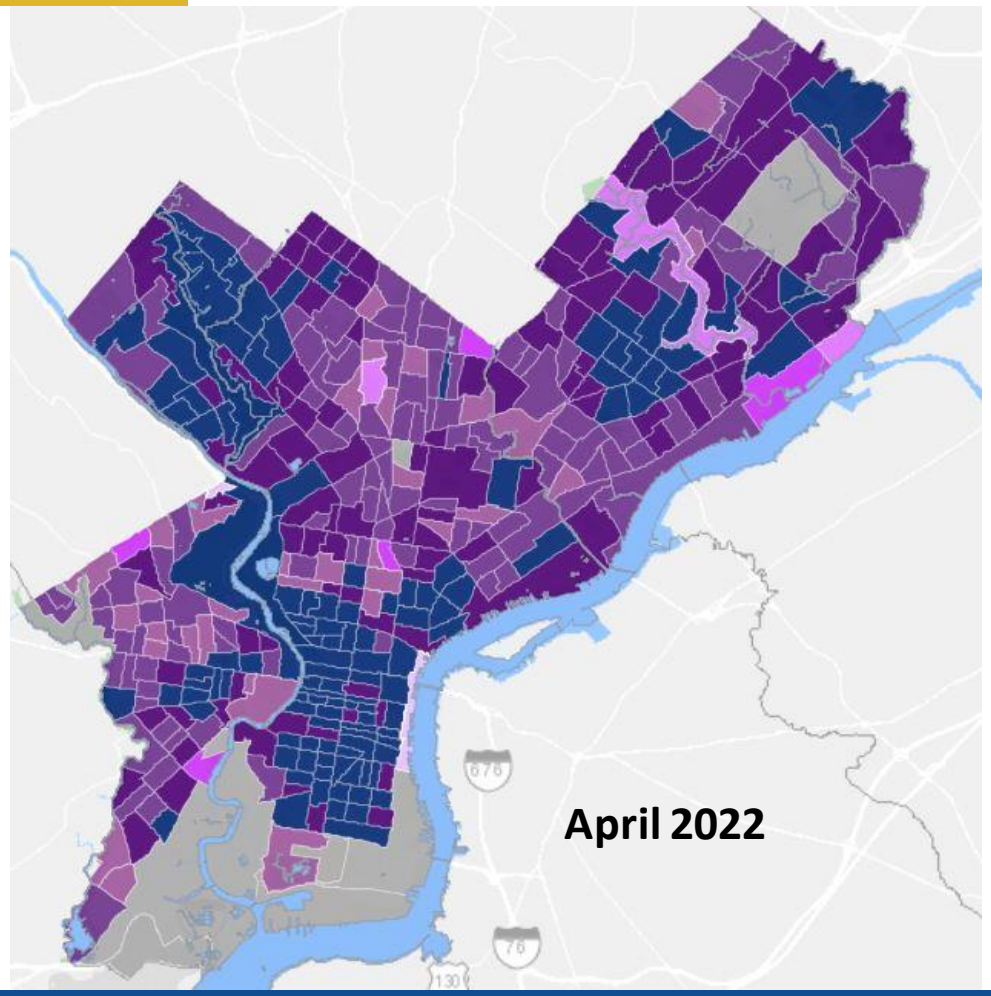


n=127 clinics

How Far We've Come







What Comes Next

- Continued commitment to ensuring all Philadelphians can access COVID19 vaccine
- Continued work to boost persons over 50 and all other eligible persons
- Continued work to ensure kids have access to COVID19 vaccine, including those under 5

10 MINUTE BREAK

Check out exhibitor tables and enjoy the breakfast spread!

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Meningitis B Action Project
a joint initiative by The Kimberly Coffey Foundation and The Emily Stillman Foundation

Meningitis B Prevention in Young Adults: Why It Matters + New Resources

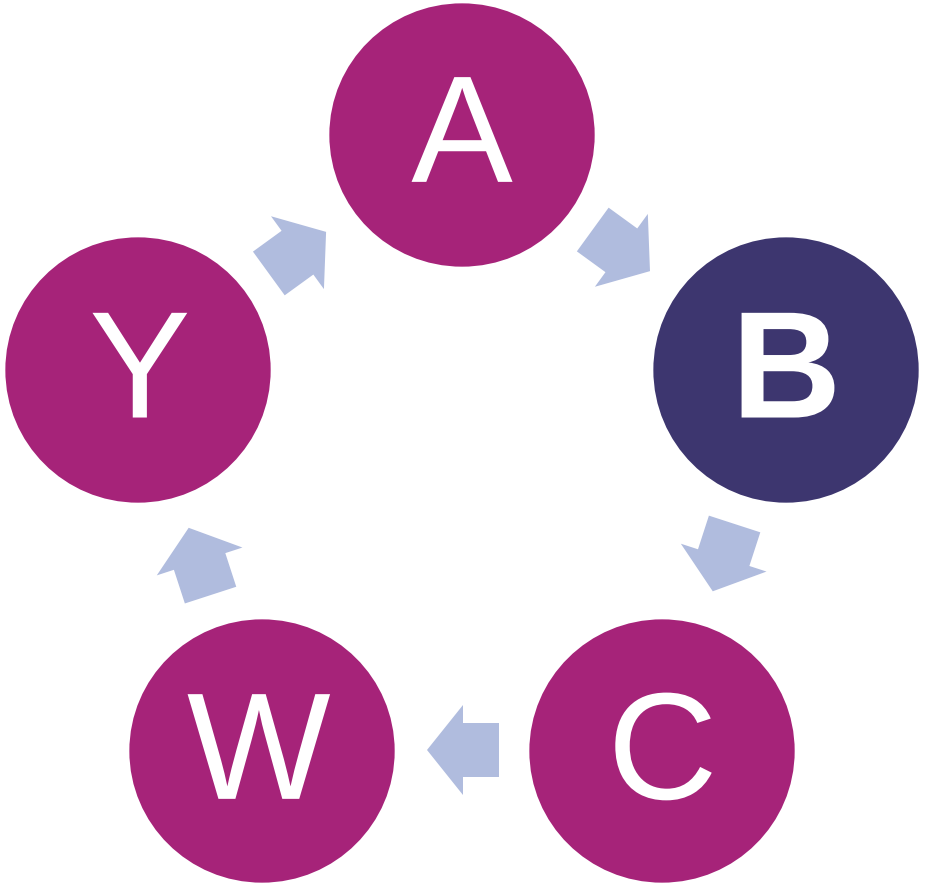
Presented by:
Alicia Stillman, MBA, MPH


PULL HERE

About Meningitis B

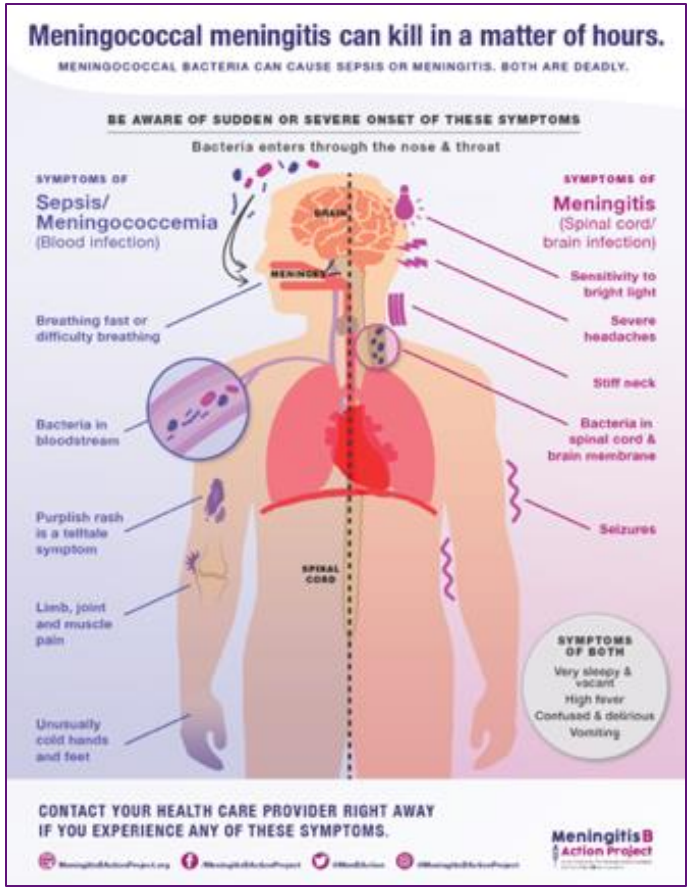
Meningococcal meningitis is the most common form of bacterial meningitis in adolescents and young adults.

It is mainly caused by 5 types of meningococcal bacteria - A**B**CWY.



Source: https://www.cdc.gov/meningococcal/about/causes-transmission.html

Two Most Common Types of Meningococcal Infections Are…



Meningococcemia (bloodstream infection that may lead to sepsis)

OR

Meningitis (infection of the membranes that surround the brain and spinal cord)

Transmission, Symptoms and Complications

It is easy to spread from person-to-person.

It can attack without warning and symptoms include rapid onset of:

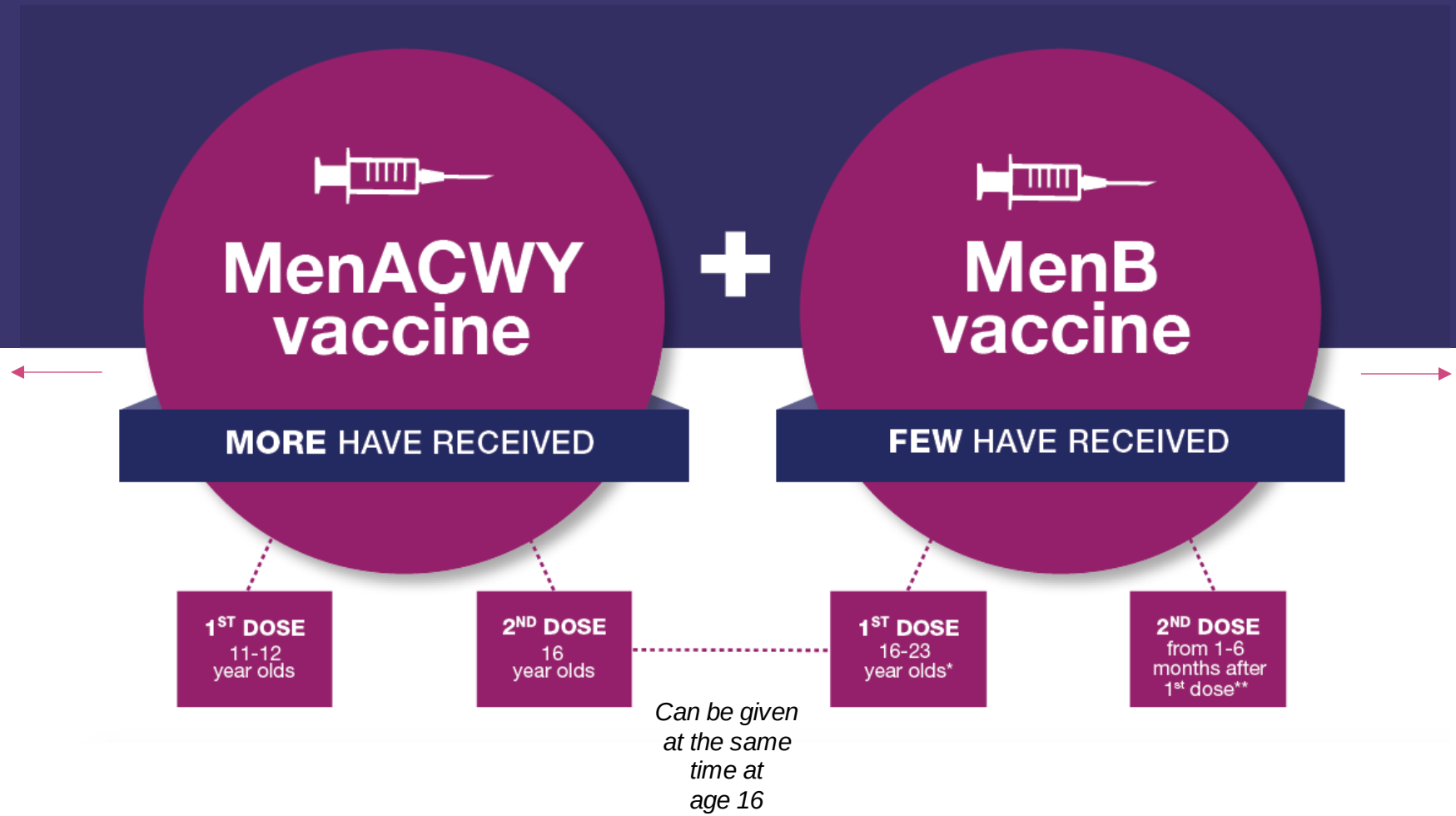
Source: https://www.cdc.gov/meningococcal/about/causes-transmission.html , https://www.cdc.gov/meningococcal/about/symptoms.html

It can kill in a matter of hours. 1 in 10 will die.
2 in 10 will face permanent complications, like limb loss or brain damage.

Meningococcal Meningitis Vaccination: It Takes Two!

If a person has not received BOTH the MenB and MenACWY vaccines, they are not fully vaccinated against meningococcal meningitis.

Routinely recommended by CDC; required by many schools and colleges



Recommended by CDC based on shared clinical decision-making

** Depending on brand*

Source: https://www.cdc.gov/vaccines/vpd/mening/public/index.html

What Is Shared Clinical Decision Making (SCDM)?

According to the CDC:

Unlike routine, catch-up, and risk-based recommendations, SCDM vaccinations are not recommended for everyone in a particular age group or everyone in an identifiable risk group.

SCDM recommendations are individually based and informed by a decision process between the health care provider and the patient or parent/guardian.

The decision about whether or not to vaccinate may be informed by the best available evidence of who may benefit from vaccination; the individual's characteristics, values, and preferences; the health care provider's clinical discretion; and the characteristics of the vaccine being considered.

Why the Difference between MenACWY and MenB?

Given that it is a newer vaccine, at the time of ACIP's review of the MenB vaccine in 2015, there was not enough evidence on:

- Duration of protection
- Effects on carriage
- Effects on herd immunity
- Strain coverage

The following factors have also been cited:

- Lower incidence of disease
- High cost of routine vaccination

Source: https://pediatrics.aappublications.org/content/139/5/e20163484
https://www.cdc.gov/vaccines/acip/acip-scdm-faqs.html#how-differ

So, What's the Problem?

Many physicians are not talking to their patients about the MenB vaccine and report an inconsistent or incorrect understanding of ACIP MenB recommendations

According to a study published in *Pediatrics* in August 2018, among 900 doctors surveyed:

49% of pediatricians
69% of family physicians

Did not discuss the MenB vaccine during routine visits for 16-18-year-olds.

Source: Allison Kempe, Mandy A. Allison, Jessica R. MacNeil, Sean T. O'Leary, Lori A. Crane, Brenda L. Beaty, Laura P. Hurley, Michaela Brtnikova, Megan C. Lindley, Alison P. Albert. Adoption of Serogroup B Meningococcal Vaccine Recommendations. Pediatrics Aug 2018, http://pediatrics.aappublications.org/content/early/2018/08/16/peds.2018-0344..info

The Impact

80%

of parents didn't know about the Meningitis B vaccine

70%

of all meningococcal cases in the US are among 16-23-year-olds are MenB

100%

of college outbreaks since 2011 are caused by MenB

7 of 10

16-18-year-olds have NOT received their first dose of the MenB vaccine

5x

more likely in college students (than non-college students), yet few colleges require the MenB vaccine

Sources:
Basta NE, Becker AB, Li Q, Nederhoff D. Parental awareness of Meningococcal B vaccines and willingness to vaccinate their teens. Vaccine. 2019 Jan 21;37(4):670-676
Centers for Disease Control and Prevention. Enhanced meningococcal disease surveillance report, 2016. Available at: https://www.cdc.gov/meningococcal/downloads/NCIRD-EMS-Report.pdf. Accessed September 19, 2019.
Serogroup B Meningococcal Disease Outbreak and Carriage Evaluation at a College — Rhode Island, 2015, Morbidity and Mortality Weekly Report, US Department of Health and Human Services/Centers for Disease Control and Prevention, June 12, 2015 / 64(22). .
Outbreak of Serogroup B Meningococcal Disease at a University — California, 2016, Morbidity and Mortality Weekly Report, US Department of Health and Human Services/Centers for Disease Control and Prevention, May 27, 2016, 65 (20)
Centers for Disease Control and Prevention. Morbidity and Mortality Weekly Report. National, Regional, State, and Selected Local Area Vaccination Coverage Among Adolescents Aged 13–17 Years — United States, 2018. Vol. 68, No. 33, 23 August 2019. Epidemiology of meningococcal disease among college students – United States, 2014-2016https://stacks.cdc.gov/view/cdc/59918
Gary S Marshall Gary S, Amanda F Dempsey, Amit Srivastava, Raul E Isturiz, US College Students Are at Increased Risk for Serogroup B Meningococcal Disease, Journal of the Pediatric Infectious Diseases Society. piz024.
Elam-Evans LD, Yankey D, Singleton JA, et al. National, Regional, State, and Selected Local Area Vaccination Coverage Among Adolescents Aged 13–17 Years — United States, 2019. MMWR Morb Mortal Wkly Rep 2020;69:1109–1116. DOI: http://dx.doi.org/10.15585/mmwr.mm6933a1

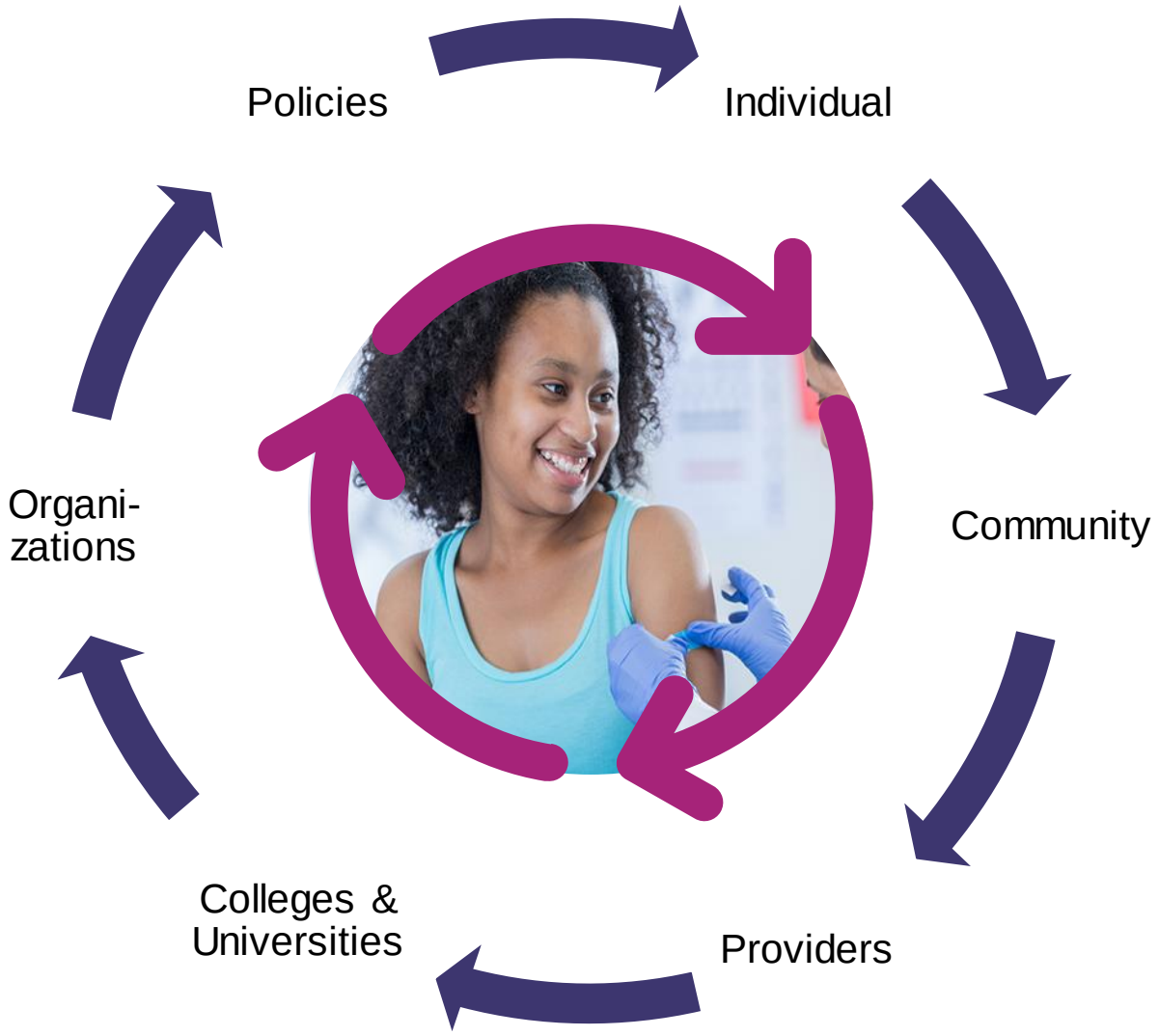
You can’t act on what you don’t know.

“It is our responsibility as providers to protect our patients as much as possible. Meningitis B is a potentially deadly disease. That’s why it’s critical that all of us proactively discuss the risks of Meningitis B and the availability of the MenB vaccine with our adolescent patients and their parents.”

– Dr. Paul Offit, Director of the Vaccine Education Center at the Children’s Hospital of Philadelphia and Professor of Vaccinology and Pediatrics at the University of Pennsylvania Perelman School of Medicine

How do we make sure that ALL parents and kids have access to the information they need to make an informed choice?

Moving from Knowledge to Action Takes A Village



How We Can Help: The Meningitis B Action Project Provides Resources To Support And Amplify Awareness And Education Efforts

Educational resources for:

- ✓ Students
- ✓ Healthcare Professionals
- ✓ Parents

Local meetings, speaking engagements, webinars etc. We are eager to share our stories to help you spread this important message.

Brochures

Tear off Appt. Reminder Pads for Doctor's Offices

Sharable Social Media Graphics

Reminder One Pager for HCPs

Magnets for Doctor's Offices and Students

Posters

Videos

Available for download on MeningitisBActionProject.org

Meningitis B Educational Curriculum

For Students, By Students

A free digital resource from the Meningitis B Action Project for peer health educators on college campuses to educate fellow students about Meningitis B.

https://meningitisbactionproject.org/forcolleges

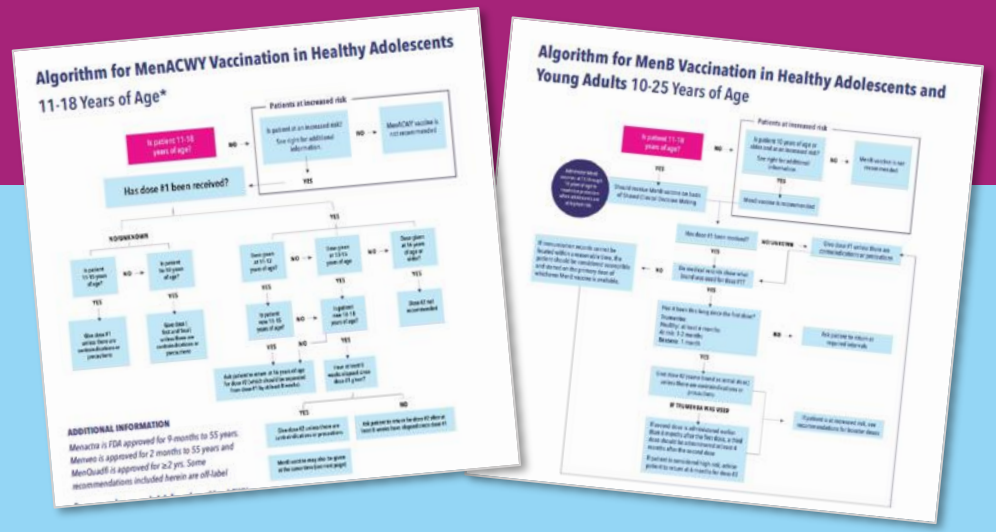
Curriculum Includes:

- Student friendly talking points
- Downloadable, printable educational materials
- Strategies for engaging college leadership
- Tips and inspiration for students

Meningococcal Meningitis Vaccination Algorithm

For Healthcare Providers

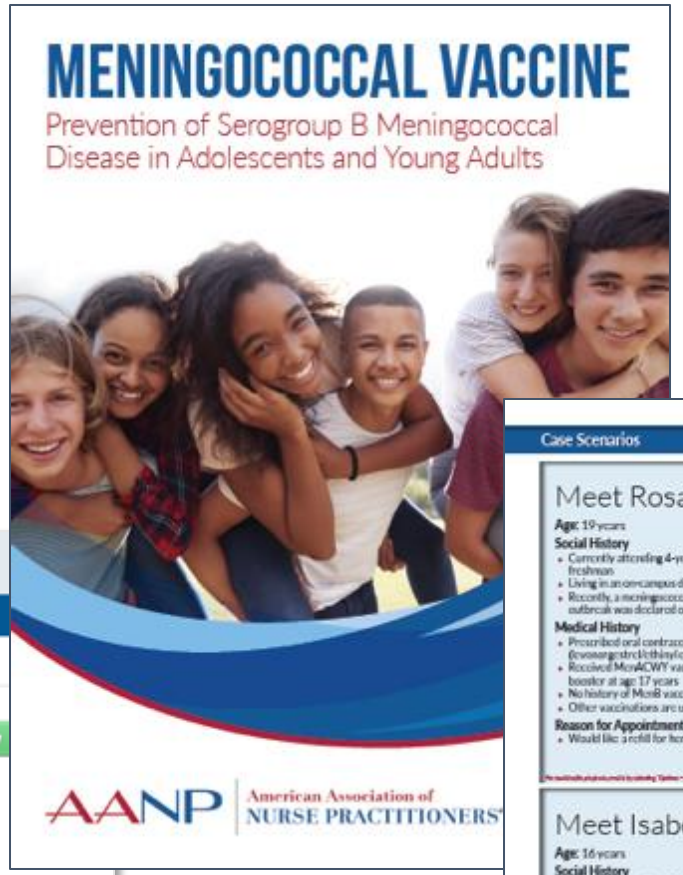
An easy-to-use and reference resource from the Meningitis B Action Project to educate HCPs on meningitis vaccination recommendations and to facilitate shared clinical decision-making.



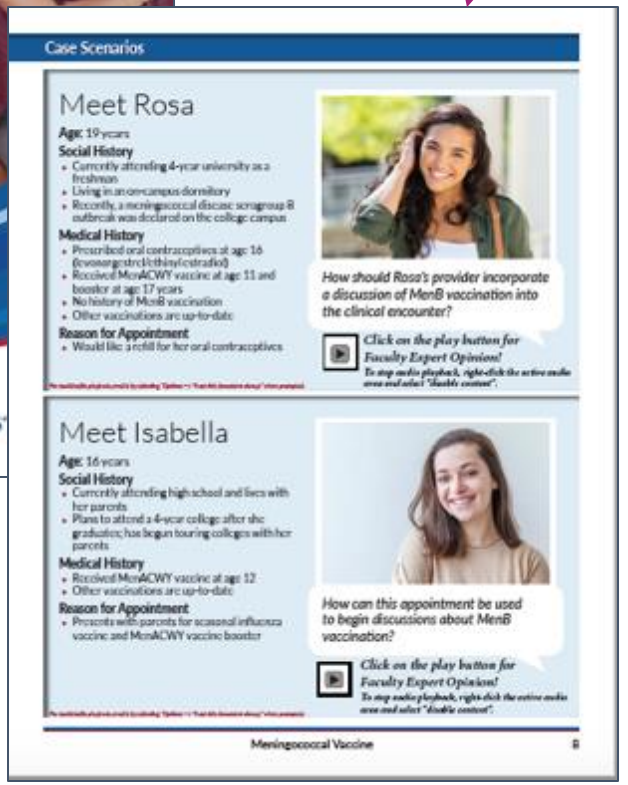
Algorithm Includes:

- Overview of CDC recommendations for meningococcal meningitis vaccination
- Easy to follow decision tree for MenACWY and MenB vaccinations
- Additional information on: administration of vaccines, persons at increased risk, contraindications and precautions
- Strategies for shared clinical decision-making

Highly Recommend: AANP Meningococcal Vaccines CE Course (Available for All)



Listen to audio case studies!



Thank you!

Contact us at
info@meningitisbactionproject.org

Our Supporters

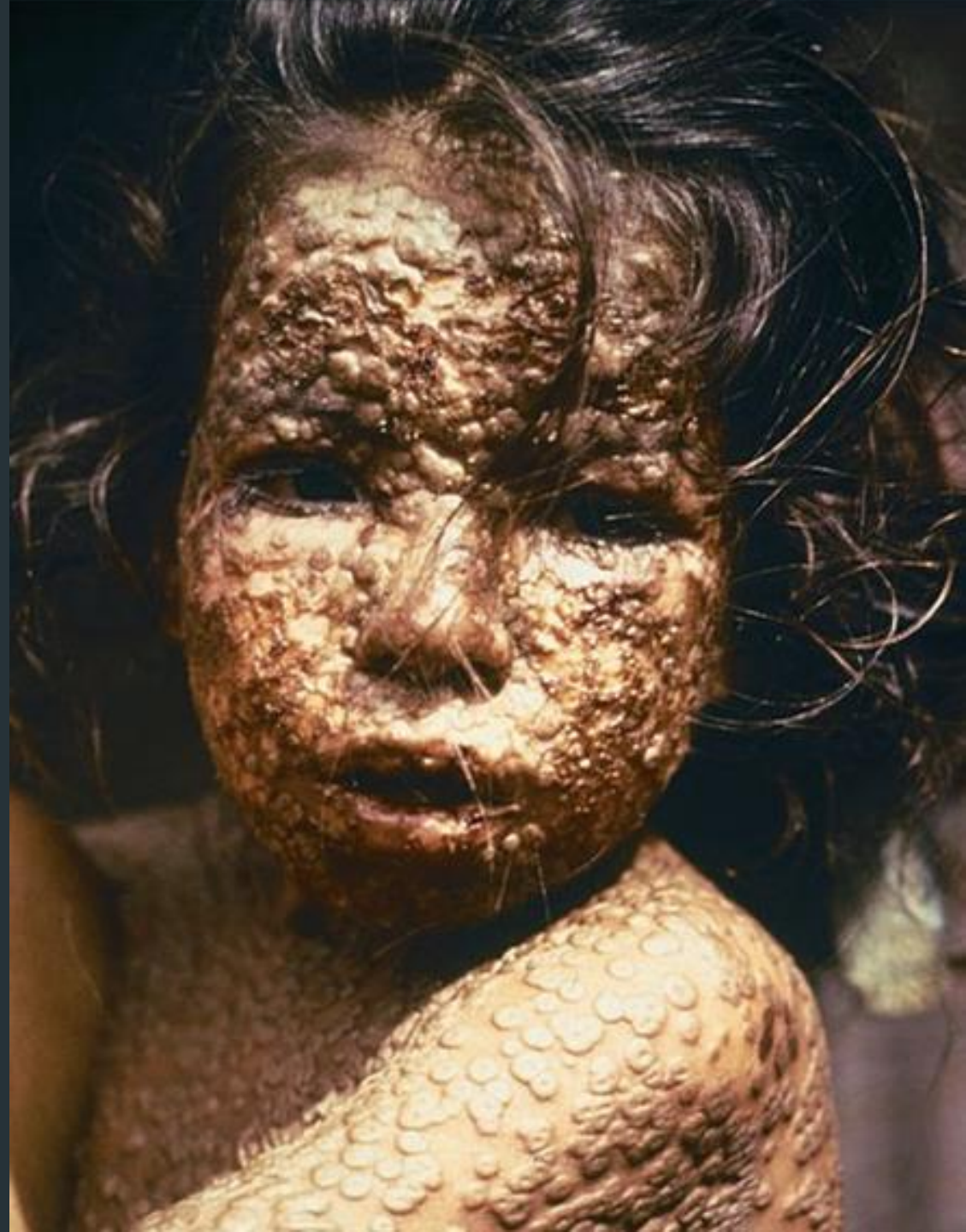
Vaccines and Schools: Looking Back to Move Forward

Dr. Barbara Klock, MD
School Health Medical Advisor
Children's Hospital of Philadelphia – Policy Lab

Vaccines and Schools:


What's for Lunch?

SMALLPOX



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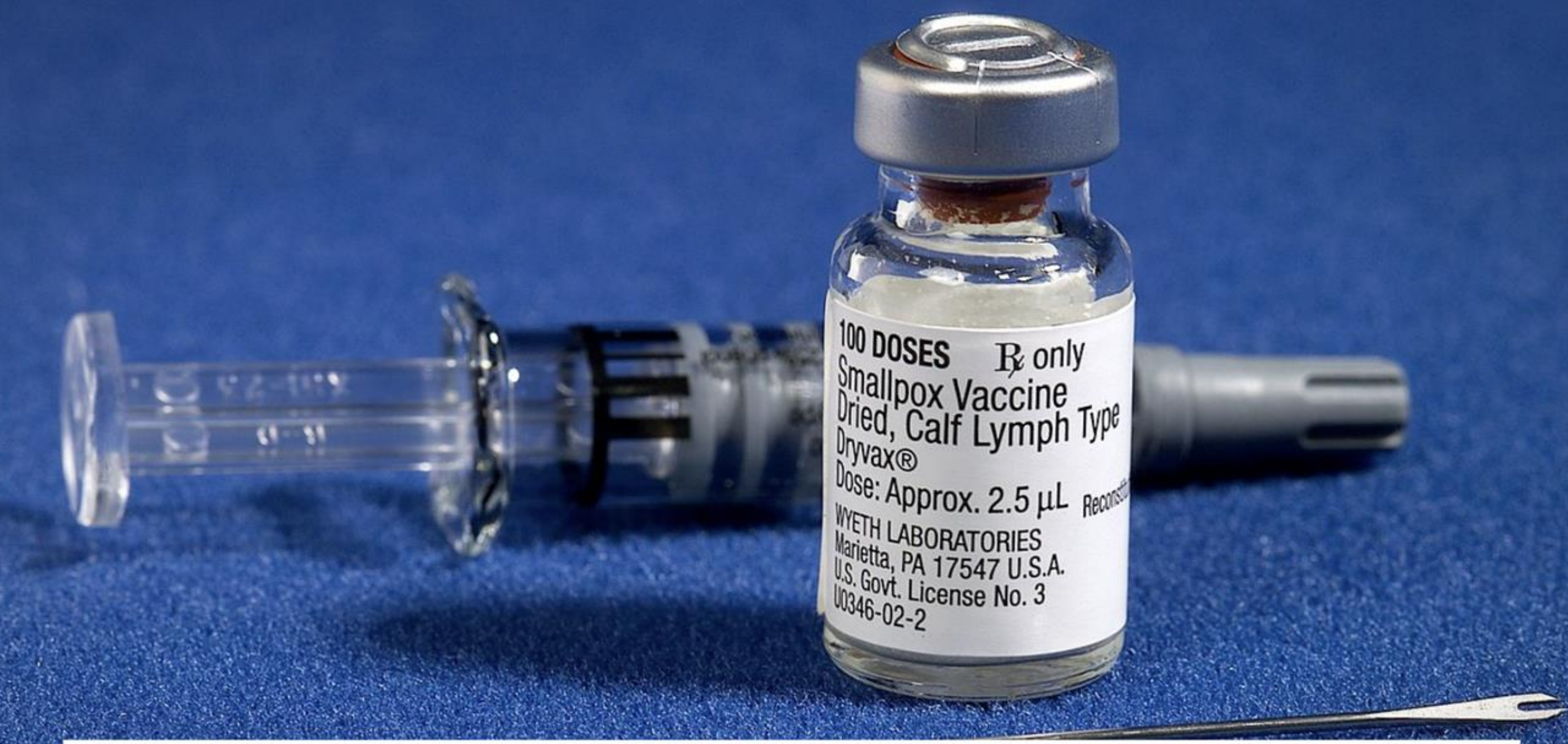


Smallpox vaccine

THE LANCET

The Lancet, Volume 351, Issue 9103, Pages 637 - 641, 28 February 1998
doi:10.1016/S0140-6736(97)11096-0

This article was retracted

RETRACTED: Ileal-lymphoid-nodular hyperplasia, non-specific colitis, and pervasive developmental disorder in children

Dr AJ Wakefield FRCS a, SH Murch MB b, A Anthony MB a, J Linnell PhD a, DM Casson MRCP b, M Malik MRCP b, M Berelowitz FRCPsych c, AP Dhillon MRCPath a, MA Thomson FRCP b, P Harvey FRCP d, A Valentine FRCR a, SE Davies MRCPath a, JA Walker-Smith FRCP a

Summary

Background

We investigated a consecutive series of children with chronic enterocolitis and regressive developmental disorder.

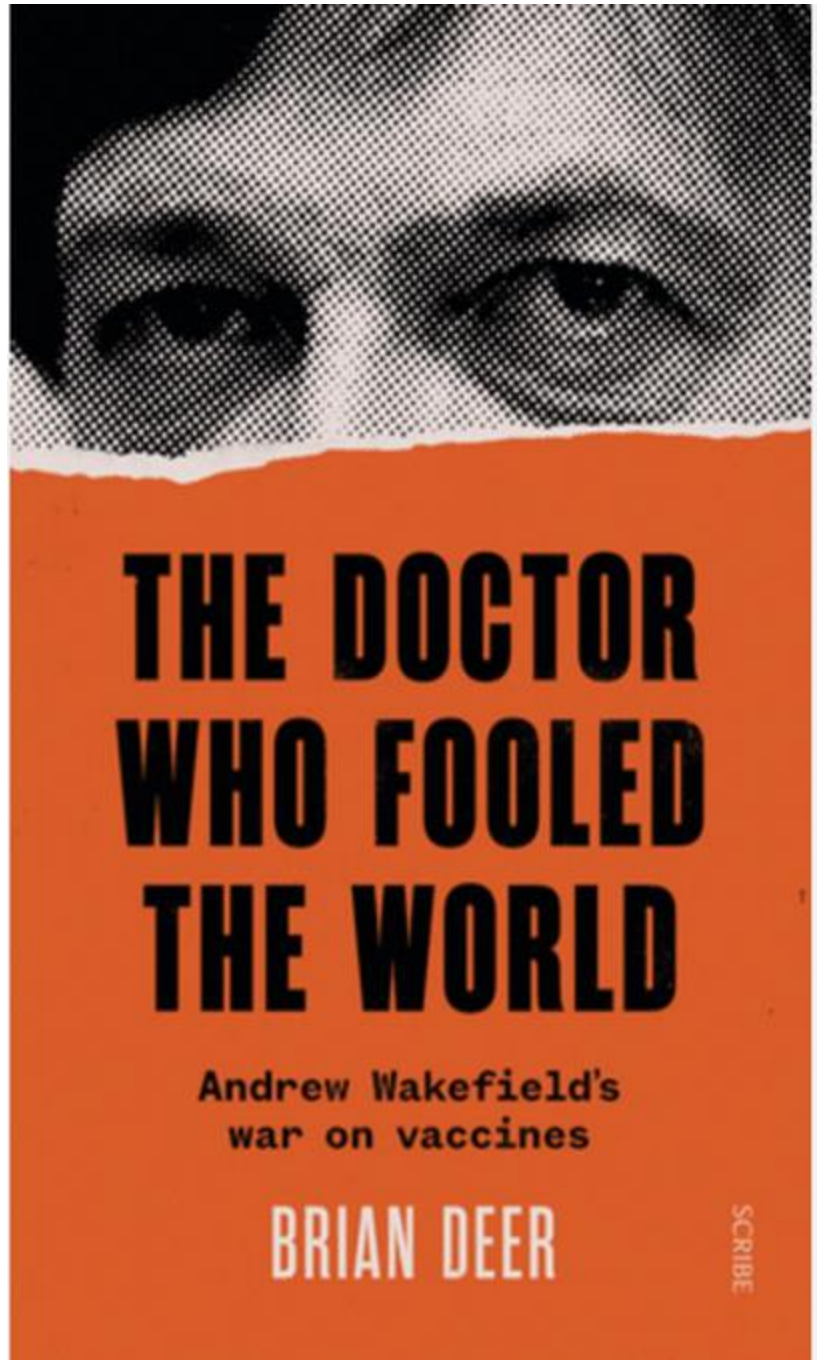
Methods

12 children (mean age 6 years [range 3–10], 11 boys) were referred to a paediatric gastroenterology unit with a history of normal development followed by loss of acquired skills, including language, together with diarrhoea and abdominal pain. Children underwent gastroenterological, neurological, and developmental assessment and review of developmental records. Ileocolonoscopy and biopsy sampling, magnetic resonance imaging (MRI), electroencephalography (EEG), and lumbar puncture were done under sedation. Barium follow-through radiography was done where possible. Biochemical, haematological, and immunological profiles were examined.

RETRACTED

Between July 2007 and May 2010, the UK General Medical Council (GMC) convened a tribunal, in light of emerging evidence of scientific misconduct, to evaluate these claims against Wakefield. Wakefield continued to deny all charges, but in January 2010, the GMC ruled against Wakefield citing that he had: "failed in his duties as a responsible consultant", acted against the interests of his patients, and "dishonestly and irresponsibly" engaged in his controversial research.

In May 2010, Andrew Wakefield was sanctioned by the GMC, effectively ending his career as a physician. In announcing the ruling, the GMC said that Wakefield had "brought the medical profession into disrepute", and no sanction short of erasing his name from the register was appropriate for the "serious and wide-ranging findings" of misconduct.



"In Rama there was a voice heard, lamentations and weeping, and great mourning, Rachael weeping for her children, and would not be comforted because they are not."—Matt. II: 2.

The City Papers Cry

VACCINATE! VACCINATE!! VACCINATE!!!

THERE'S MONEY IN IT!!!

TWENTY THOUSAND VICTIMS!!! will be Vaccinated within the next ten days in this City under the present **ALARM!!!**

That will put **$10,000** into the pockets of the Medical Profession.

CLEANLINESS, SANITATION AND HYCIENE ARE "NONSENSE," unworthy of attention by our Board of Health.

FILTHY STREETS, FILTHY LANES, AND FILTHY DRAINS help the Medical Profession.

THERE'S MONEY IN IT!!!

The City Papers Cry

VACCINATE! VACCINATE!! VACCINATE!!!

O tempora, O mores!

August 1885

An 1802 caricature imagines outlandish side effects from the use of cow pox to vaccinate against smallpox. Credit: James Gillray/British Cartoon Prints Collection/Library of Congress

This illustration depicts a compulsory vaccination drive in New Jersey circa 1880s. (National Library of Medicine)

THE ANTI-VACCINATOR,

And Advocate of Cleanliness.

"If an offence come out of the Truth, better it is that the offence come than the Truth be concealed."—JEROME.

EDITOR, MONTREAL, OCTOBER, 1885. ALEX. M. ROSS, M.D.

SMALL-POX.

Small-pox is a member of the group of diseases described as zymotic, which originate in unwholesome conditions of life, and in common are diminished or prevented by the reduction and removal of these conditions. It is a disease more ancient than our historical records. Long before the date of inoculation and vaccination we find the disease identical in every respect with that of to-day. Small-pox appeared at sundry distant periods, sometimes not returning during an entire century; and was at times virulent, and at other times mild. Into whatever country it penetrated, amongst whatever people it found a home, and wherever its ravages decimated the population, the conditions which formed its development and its diffusion were one and the be directed. The Legislature can do much—the people can do more; but the people must be taught the importance of the subject in all its relations to their daily life. Our children must be educated in the science of life, how to preserve it and how to promote it. Knowledge which in its results can save or destroy, must not be left to get anyhow, or not to get at all.

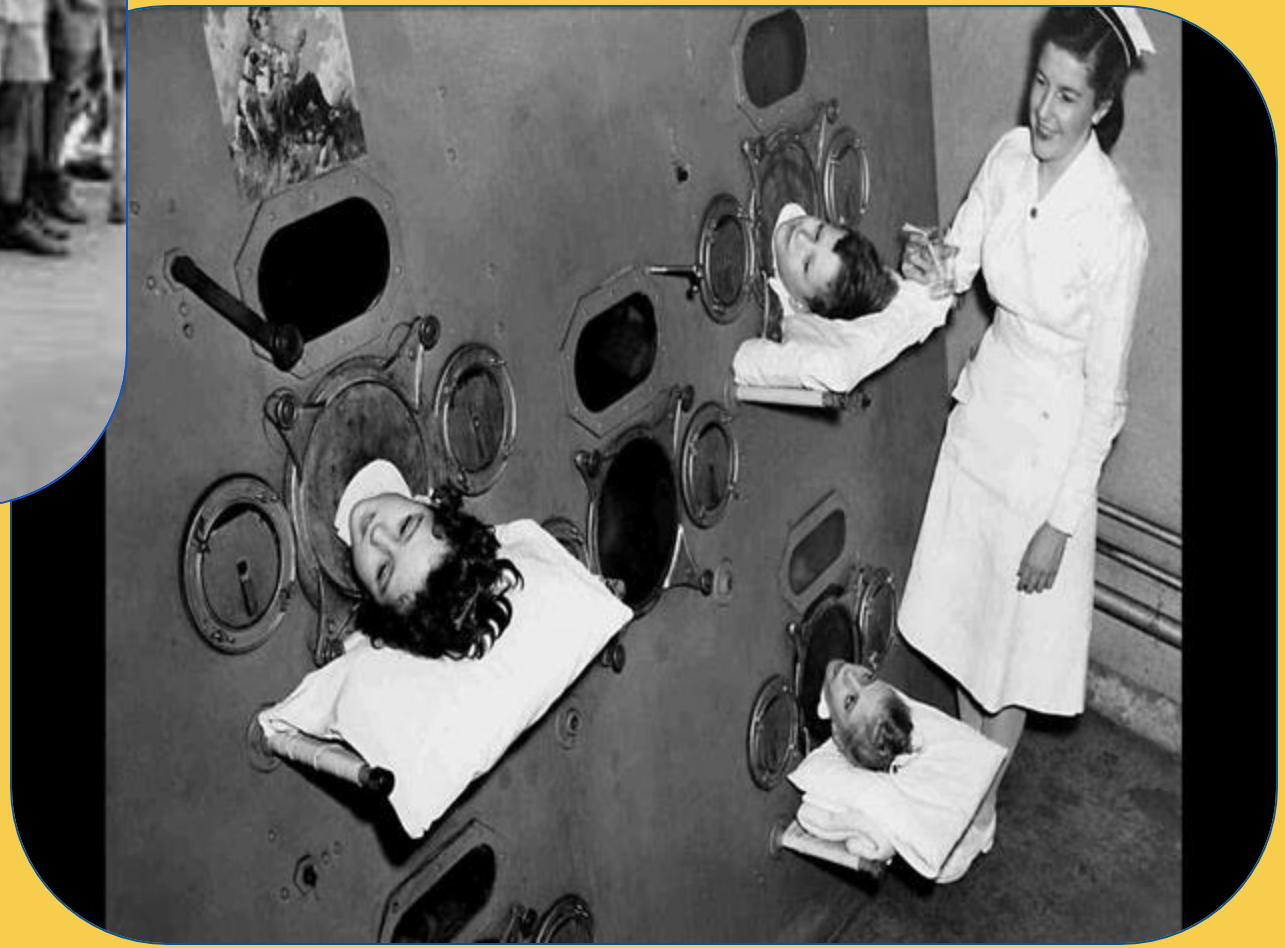
Social and sanitary science, by producing a healthy mind, in a healthy body, will teach a man how to regulate and economize his life; and reason will teach him how to utilize it. Man is a sanitary animal. The structure and the uses of the skin prove this beyond doubt. Pure air, pure water (inside and outside), plain, wholesome food, plenty of exercise in the pure air—these are natural health-producing agents.

INOCULATION FALLACY.

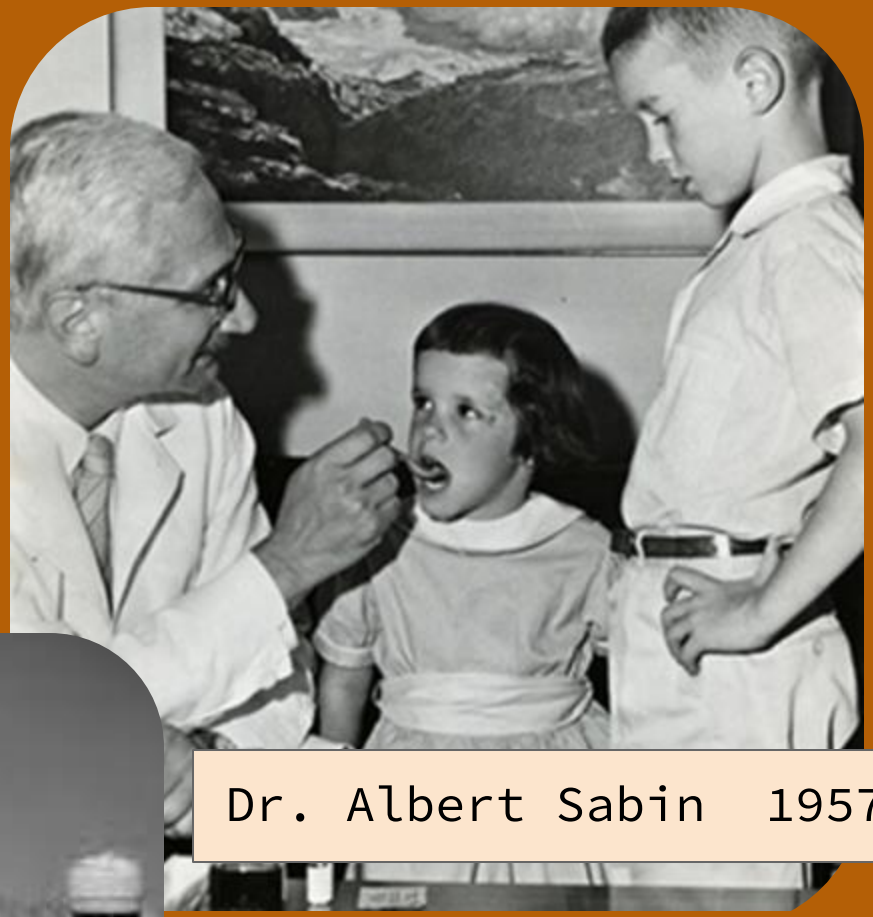
Before the present system of vaccinating with cow-pox virus was introduced, the pros-

with running sores, or horse-grease cow-pox. That is what Jenner pronounced *a sovereign antidote against small-pox*. (See Baron's Life of Jenner, vol. 1, p. 135.)

I give the above details to show the origin of this filthy practice. Domestic animals are subject to many diseases, and these can be, and often are, transferred to the bodies of human beings by vaccination. As vaccination is falling into disrepute as a preventive of small-pox, as originally asserted by Jenner and his followers, a cry has arisen for *re-vaccination*. To be effective—it is now said—vaccination must be repeated every seven years, while others say annually and semi-annually. It is said by the advocates of vaccination that, owing to transmission from arm to arm, "Jenner's horse-grease cow-pox" virus has lost its power as a preventive; hence, to retrieve the credit of vaccination, the calf-pox project has been started, with the unscientific nonsense about resorting *to pure lymph from the calf!*



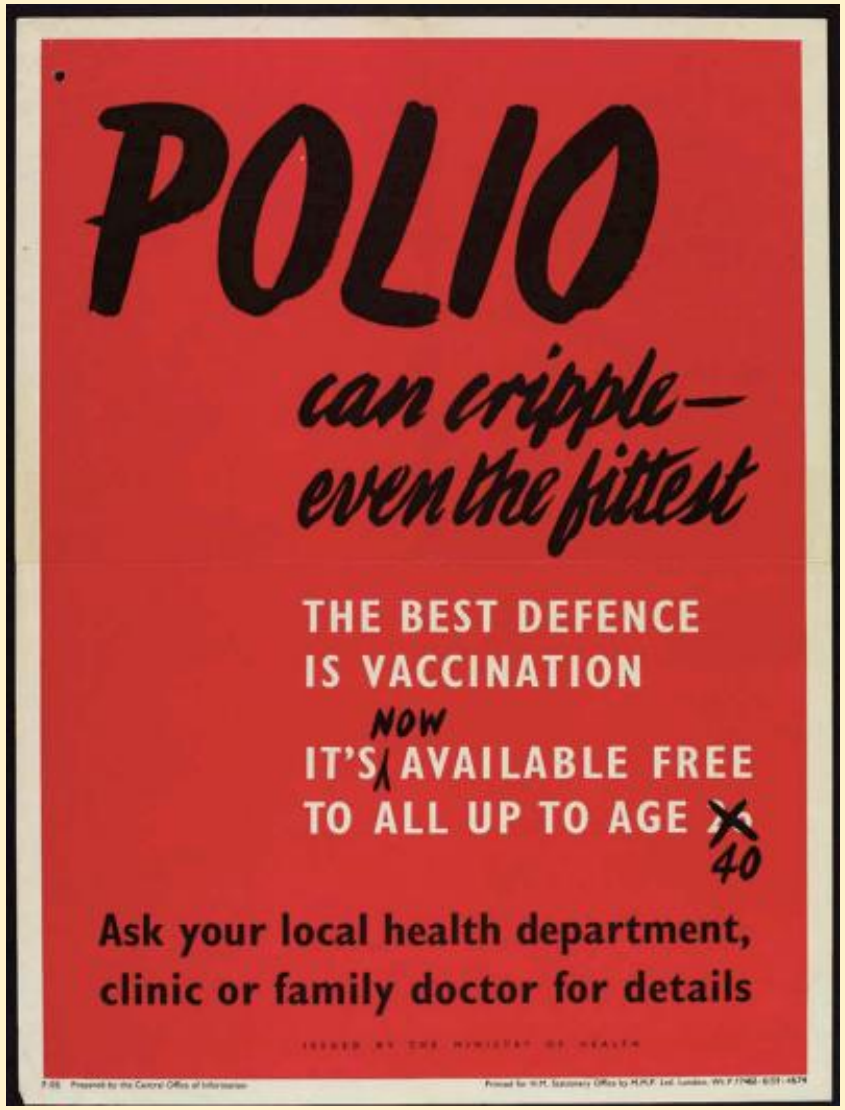
Dr. Hilary Koprowski 1950



Dr. Albert Sabin 1957

Dr. Jonas Salk 1953

Peter Salk receiving the polio vaccine from his father, Jonas Salk, in 1953 *March of Dimes Foundation*


POLIO
can cripple—
even the fittest
THE BEST DEFENCE
IS VACCINATION
NOW
IT'S AVAILABLE FREE
TO ALL UP TO AGE 40
Ask your local health department,
clinic or family doctor for details


THE NATIONAL FOUNDATION FOR I RALYSIS
CERTIFIES THA
POLIO PIONEER
1954
HAS BEEN ENROLLED AS A
POLIO PIONEER
and this certificate of membership is
hereby presented for taking part in the first national tests
of a trial polio vaccine conducted during 1954.
Basil O'Connor PRESIDENT


POLIOMYELITIS
VACCINE
SUTTER

2009

Students in Muskegon, Michigan, wait in line to receive their H1N1 swine flu vaccine shots during the 2009 pandemic. Researchers recently identified a virus that shares characteristics with the 2009 H1N1 virus.

COVID-19 VACCINE

Vaccine Resources | Vaccine Events | COVID Health and Safety Overview | Vaccination of Athletes

Student Vaccinations

A CHOP & SDP VACCINATION EVENT

IT'S YOUR TURN TO GET VAXXED!

What's Happening?

Vacinations for COVID-19 2 dose Pfizer Vaccine

Where?

Roberto Clemente Middle School
122 West Erie Avenue

When?

June 22 from 3:30-7:30 pm

Call or Text "READY" to 267-328-5378 or visit CHOPVax.chop.edu

To register for an appointment

Department of Public Health
CITY OF PHILADELPHIA

PHILLY TEEN VAXX

Children's Hospital of Philadelphia

Are you 12-17 years old?
Make sure your parent/guardian is available in person or by phone for verbal consent.

Department of Public Health CITY OF PHILADELPHIA | Children's Hospital of Philadelphia | Mayor's Office of Youth Engagement | BLACK DOCTORS COVID-19 CONSORTIUM

We provide the Faxx, so you can get the Vaxx

If you're 12 years old or older, come get VAXXED! A parent or guardian is required to be there with you if you are under the age of 16.

Vaccine Events

Friday, May 14th
Edward O'Malley Recreation Center
1-4pm

Saturday, May 15th
Deliverance Evangelistic Church
10-12pm: Teen Events
12-4pm: Get VAXXED!

Tuesday, May 18th
University of the Sciences
10-4pm

Thursday, May 20th
Simon Gratz High School
1-4pm

5/15
Register for the events above!
5/14

No Appointment Necessary

5/20
5/18

OUR COMMUNITY NEEDS IMMUNITY TO GET BACK TO THE THINGS WE LOVE

Myths and Facts about the COVID-19 Vaccines!

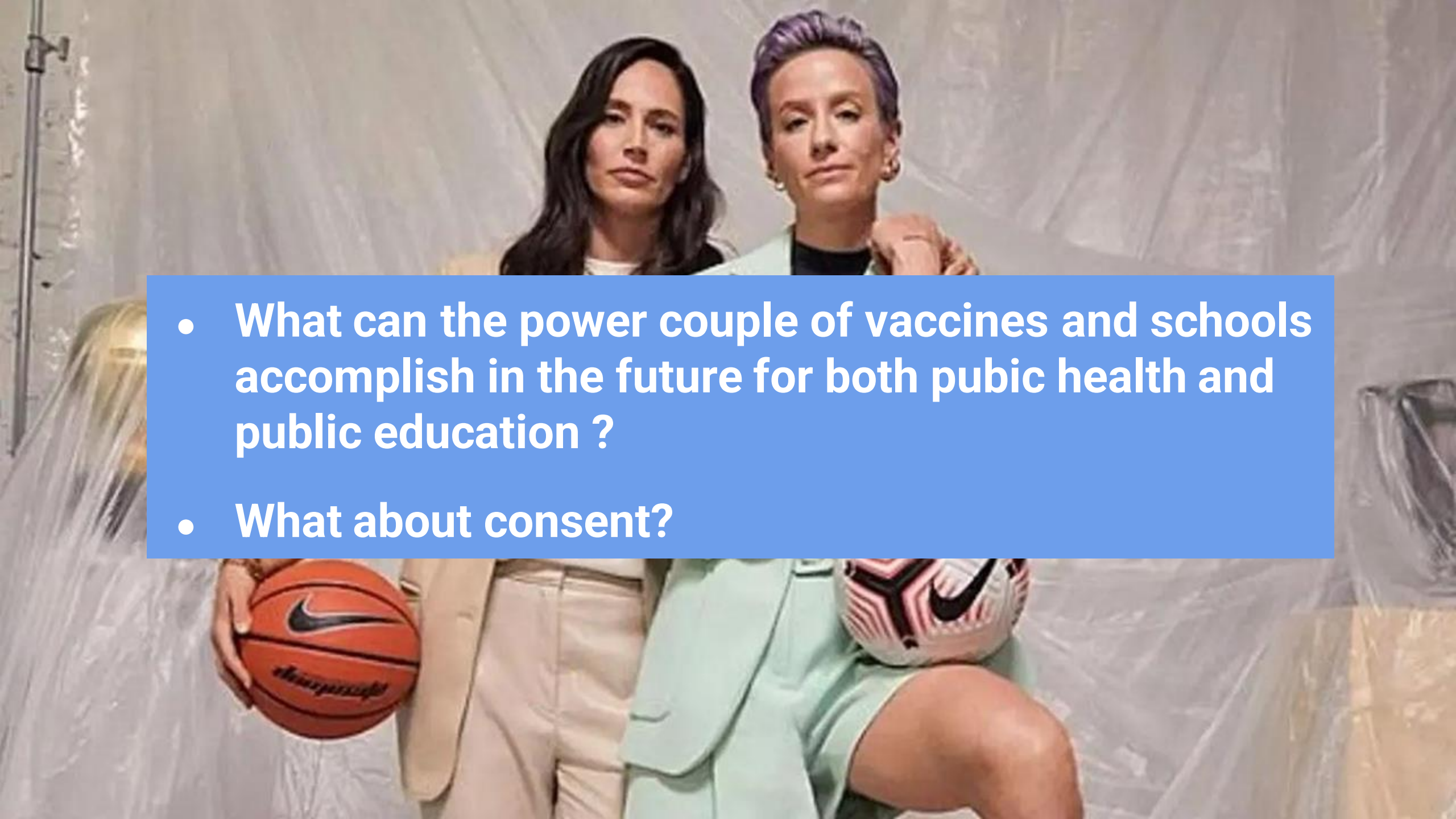
-YOU IMPROVE YOUR IMMUNITY TO COVID-19
-YOU'LL PROTECT OTHERS LIKE FAMILY MEMBERS AND THOSE HIGH-RISK

The virus waits for nobody. Let's not wait for it. Get vaccinated


TELEPHONE


Kodak
Film
ONE DAY PHOTO FINISHING

- Anti - vaxxers have always existed and will always exist.
- No vaccine is 100%
- Schools are good places to reach children for vaccinations
- Education is key
- Socio-political climate will also be an influencer



- What can the power couple of vaccines and schools accomplish in the future for both pubic health and public education ?
- What about consent?

City of Philadelphia

Department of Public Health

Regulations Governing the Immunization and Treatment of Newborns, Children and Adolescents (Consolidated for Agency Use, July 19, 2019)

MEDICAL EVALUATION, IMMUNIZATION, AND TREATMENT OF MINORS

(a) Minor's Consent to Examination and Treatment. A person between the ages of 11 and 18 may give consent, without the approval or consent of another person, for examination, treatment and services to determine the presence of or to treat a sexually transmitted disease and any other disease, infection or condition reportable pursuant to the Disease Prevention and Control Law of 1955 and the regulations adopted thereunder, provided such person is capable of providing informed consent. The health care provider may not be sued or held liable for implementing appropriate diagnostic measures or administering appropriate treatment to the minor if the minor has consented to such procedures or treatment.

(b) Minor's Consent to Immunization. A person between the ages of 11 and 18 may authorize his or her own immunization, without the approval or consent of another person, to prevent occurrence of a reportable disease, infection, or condition, provided such person is capable of providing informed consent. A parent or guardian does not need to be present at the time the vaccine is administered. Written consent by the minor is not required, but documentation that the vaccine information statement (VIS) was provided to the vaccine recipient, and the publication date of the VIS, is required. The health care provider may not be sued or held liable for providing such immunization to the minor if the minor has consented to such procedures or treatment.


A GOAL
WITHOUT A
PLAN IS JUST
A DREAM.
CoolnSmart.com

LUNCH

1 hour break! Enjoy your lunch in the gardens.

AGENDA

Welcome Introduction ……9:15am-9:25am

Motivational Welcome……..9:25am-9:40am

Philadelphia's COVID Vaccine Journey and Looking Forward…….. 9:40am-10:10am

10 Minute Break ……..…….10:10am–10:20am

Why Meningitis B Vaccine Matters……10:20am-11:00am

Vaccines and Schools: Looking Back to Look Forward…… 11:00am-12:00pm

Lunch …….…….12:00pm – 1:00pm

Re-establishing Vaccine Coverage Post COVID-19 …… 1:00pm-1:30pm

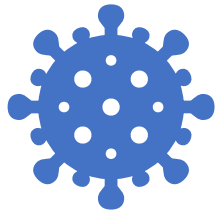
Stories from the Frontlines …… 1:30pm-2:00pm

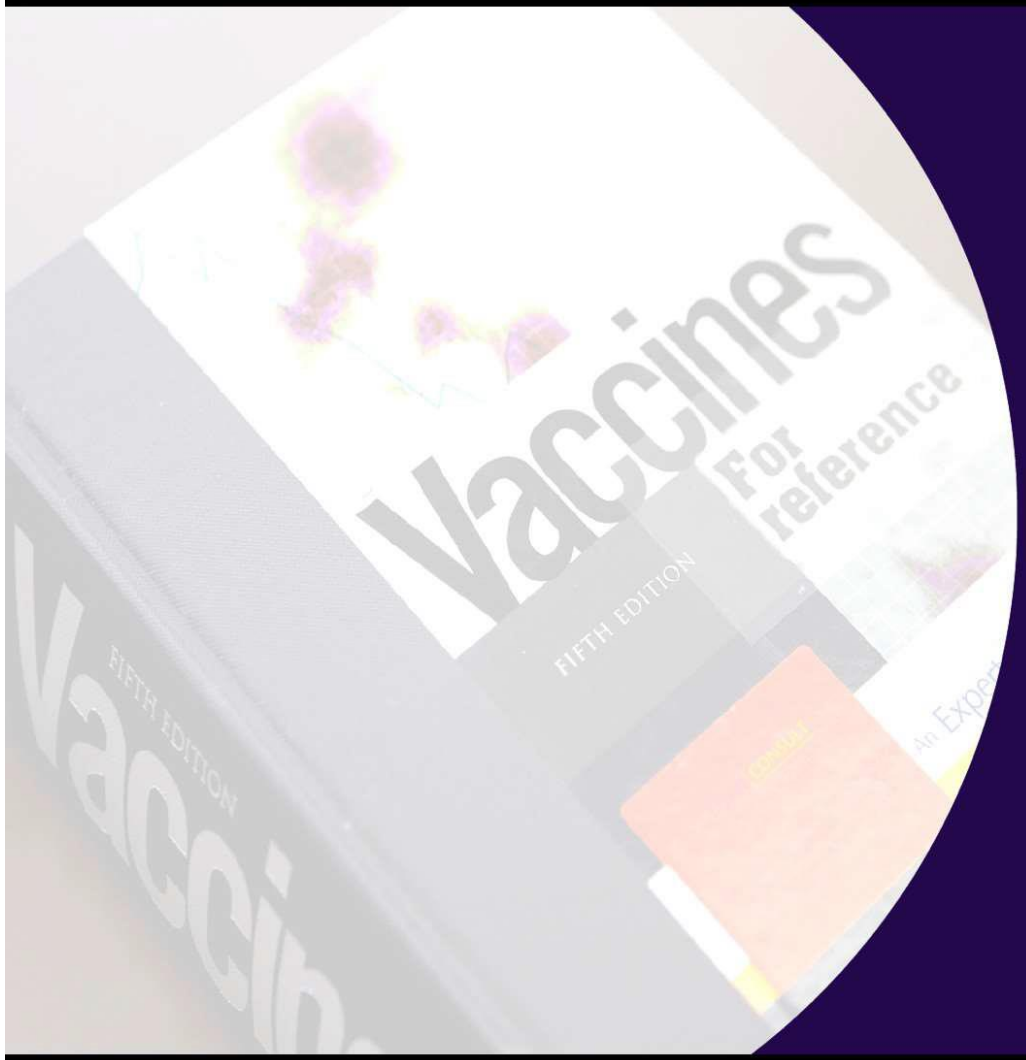
Vaccine Equity: Panel …… 2:00pm-3:00pm

Closing Remarks ……3:00pm-3:30pm

Re-establishing Vaccine Coverage Post COVID-19

Helene Janosczyk, MA
Medical Science Liaison
Sanofi





MSL-TITLE-004 - P - DISTRIB - EXP 3/19/23

sanofi

Helene Janosczyk

Medical Science Liaison

Sanofi Vaccines

Re-establishing Vaccine Coverage
Post COVID-19

Declining Immunization Rates: A Global Concern

Global Childhood Vaccination

- Measles mortality was at historical high, with over **200,000** deaths in 2019[4]
- Rates against diphtheria, tetanus, pertussis, measles and polio had stalled for several years at **~86%**[1]

WHO Vaccination Guidance Released

- Framework for decision-making: implementation of mass vaccination campaigns in the context of COVID-19[2]

Pre-Pandemic Problems | **March 2020** | **May 2020** | **Present**

Global Immunization Services Disrupted

- More than half **(53%)** of the 129 countries reported moderate-to-severe disruptions[3]
- WHO survey during the initial pandemic phase reported a **70% reduction** in routine immunization services[4]
- Put an estimated **80 million** infants at risk for vaccine preventable diseases[3]

Countries Work to Recover Lost Ground

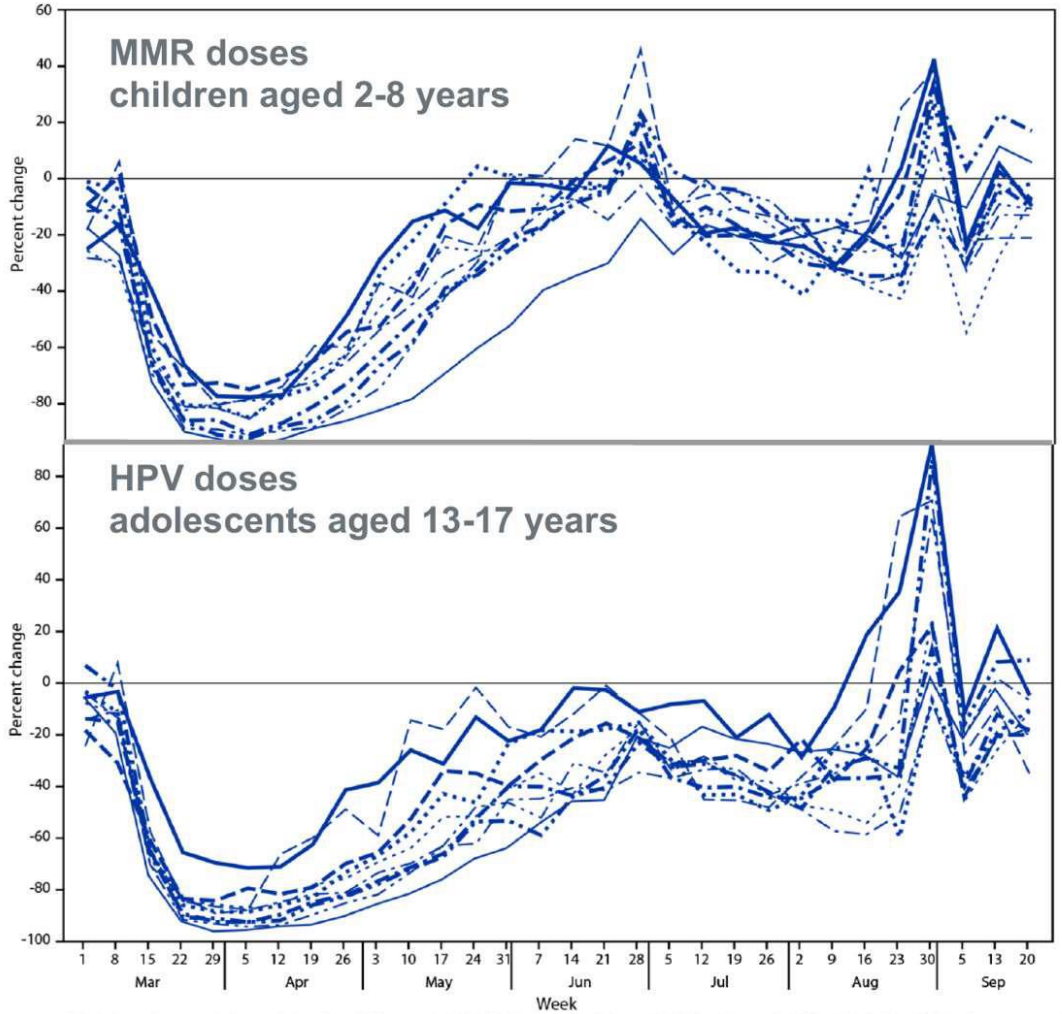
"We cannot allow a legacy of COVID-19 to be the resurgence of measles, polio and other killers. The future health and wellbeing of millions of children and their communities across the globe depends on it."[1]

-CEO of Gavi, the Vaccine Alliance.

Reference: **1.** WHO. July 2021. https://www.who.int/news/item/15-07-2021-covid-19-pandemic-leads Accessed 8 March 2022. **2.** WHO. May 2020. Framework for decision-making: implementation of mass vaccination Accessed 8 March 2022. **3.** WHO. May 2020. https://www.who.int/news/item/22-05-2020-at-least-80-million-children . Accessed 8 March 2022. **4.** Ota MOC et al. Ann Med. 2021;53(1):2286-2297.

Declining Immunization Rates: United States

Comparing Percent Change in MMR & HPV Doses Administered in 10 U.S. Jurisdictions: 2018/2019 VS. 2020

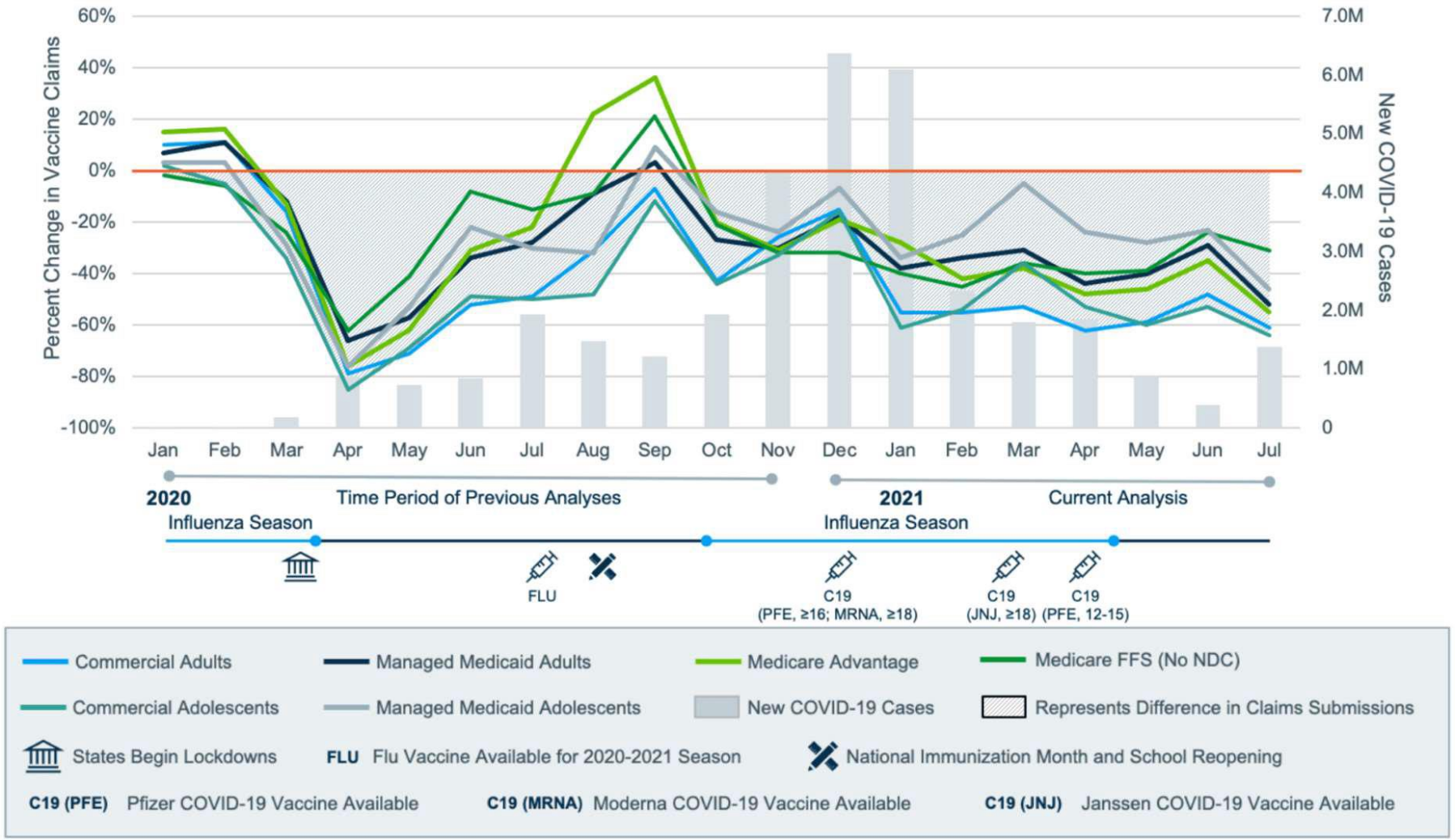


None of the jurisdictions demonstrated a sustained or prolonged increase in the number of weekly doses administered above prepandemic administration levels, which would have been necessary to catch up children and adolescents who missed routine vaccinations

- Idaho
- Iowa
- Louisiana
- Michigan
- Minnesota
- New York City
- North Dakota
- Oregon
- Washington
- Wisconsin

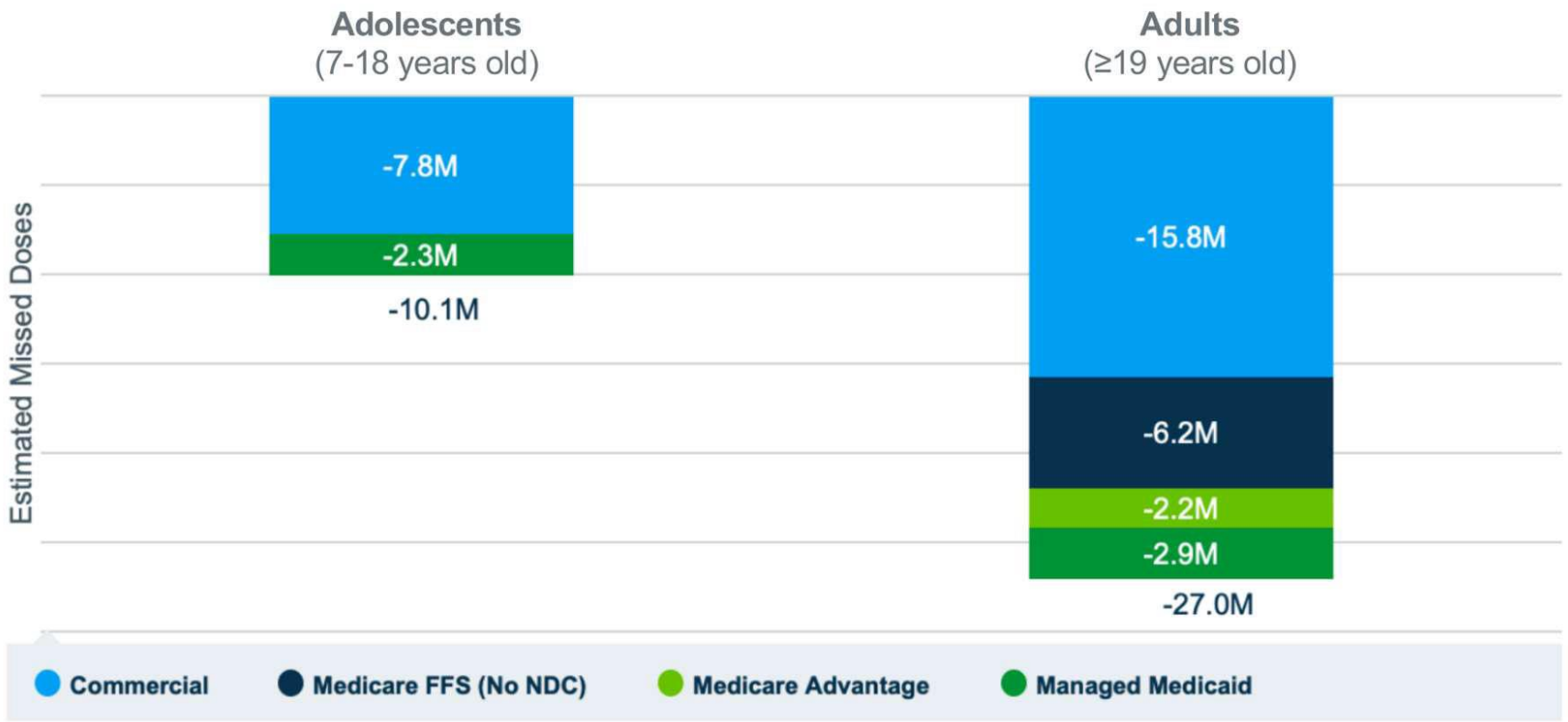
Reference: Table adapted from Murthy BP et al. MMWR Morb Mortal Wkly Rep 2021;70:840–845. Accessed 7 March 2022

Changes in Claims for All ACIP-Recommended Adolescent & Adult Vaccines 2020 to 2021 Compared to 2019



Reference: Table from Liow, C et al.Avalere. January 2022. https://avalere.com/insights/declines-in-routine-adult-and-teen-vaccinations-continued-in-2021
Accessed 8 March 2022

Estimated Missed Doses for All Vaccine Claims Across Markets, January 2020 - July 2021 VS. 2019



37.1 million potentially missed doses from January 2020 to July 2021

Reference: Table from Liow, C et al.Avalere. January 2022. https://avalere.com/insights/declines-in-routine-adult-and-teen-vaccinations-continued-in-2021 Accessed 8 March 2022

Majority of U.S. Adults Are Missing Routine Vaccinations

Despite the benefit of vaccines, at least **3 out of every 4 adults** are missing one or more routinely recommended vaccines, made worse by the COVID-19 pandemic[1]

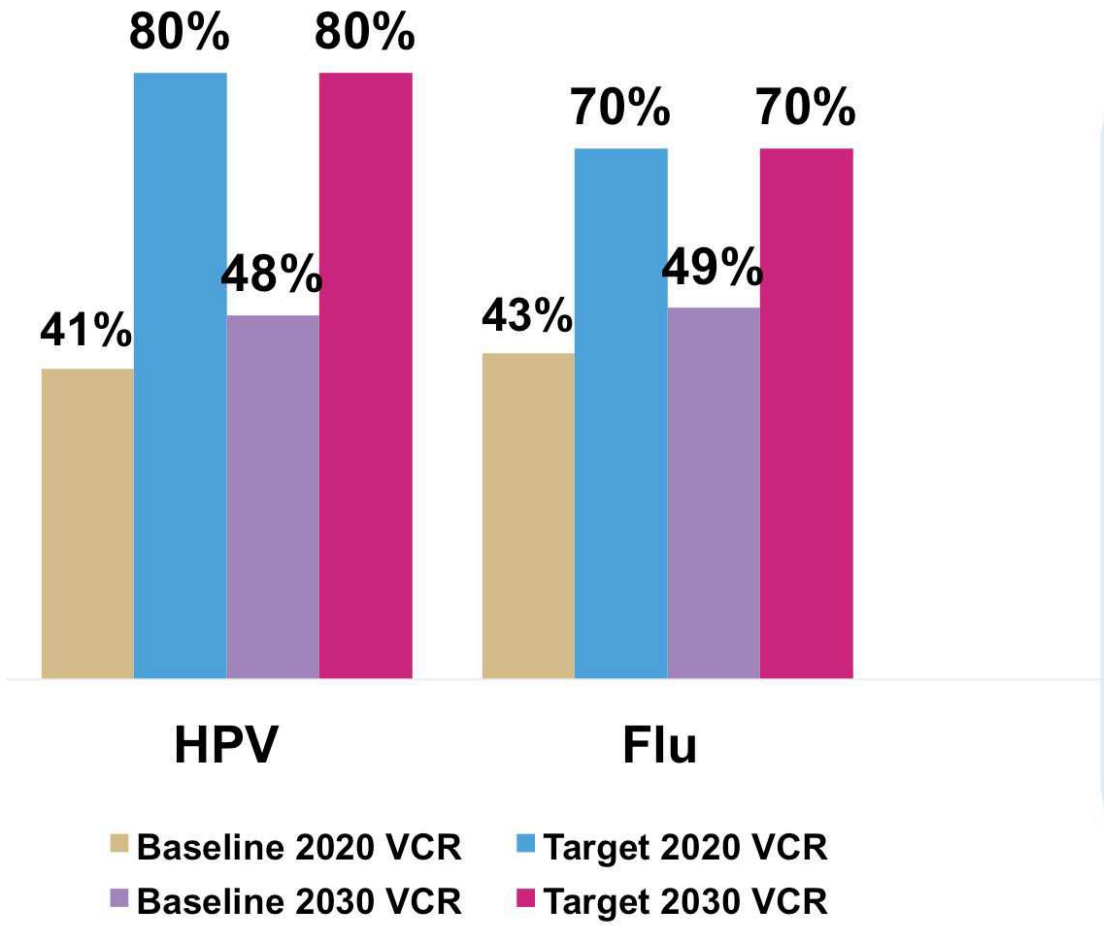
Status: Developmental

Increase the proportion of adults age 19 years or older who receive recommended age-appropriate vaccines

This objective currently has developmental status, meaning it is a **high-priority public health issue** that has evidence-based interventions to address it, but doesn't yet have reliable baseline data[2]

Reference: 1. CDC. Adult Vaccination Resources. August 2021. https://www.cdc.gov/vaccines/hcp/adults/for-practice/increasing-vacc-rates.html. Accessed 9 March 2022 **2.** Healthy People 2030. 2022. https://health.gov/healthypeople/objectives-and-data/browse-objectives/vaccination/increase-proportion-adults-age-19-years-or-older-who-get-recommended-vaccines-iid-d03. Accessed 9 March 2022.

Healthy People 2030 Objectives: General Vaccination



Increase the proportion of adolescents who receive recommended doses of the HPV vaccine[2]

Increase the proportion of persons who are vaccinated annually against seasonal influenza[2]

Baseline 2020 VCR for HPV was calculated using the average of the percentage of male and female adolescents aged 13 through 15 years who received 2 or 3 doses of the HPV vaccine as recommended. Baseline 2020 VCR for Influenza was calculated using the average of the percent of children aged 6 months through 17 years and adults aged 18 and older who are vaccinated annually against seasonal influenza.

Reference(s): (1) Office of Disease Prevention and Health Promotion. October 2020. https://www.healthypeople.gov/2020/topics-objectives/topic/immunization-and-infectious-diseases. Accessed 11 February 2021. (2) US Department of Health and Human Services and Office of Disease Prevention and Health Promotion. December 2020. https://health.gov/healthypeople/objectives-and-data/browse-objectives/vaccination. Accessed

Healthy People 2030 Objectives: General Vaccination

Increase the proportion of pregnant women who receive 1 dose of the tetanus-diphtheria-acellular pertussis (Tdap) vaccine during pregnancy (Developmental)[2]

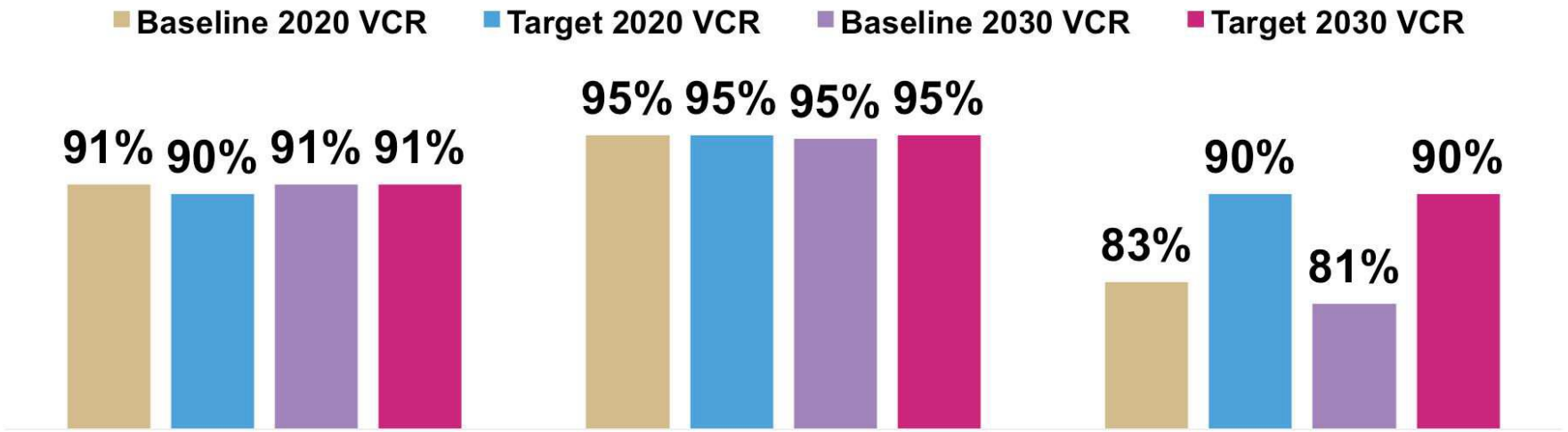
"Mom and toddler waiting in a doctor's office" by SELF Magazine is licensed with CC BY 2.0. To view a copy of this license, visit https://creativecommons.org/licenses/by/2.0/

During the 2019–2020 season, only 40% of pregnant women received the tetanus, diphtheria, and pertussis (Tdap) vaccine.[1]

Objective currently has developmental status, meaning it is a high-priority public health issue that has evidence-based interventions to address it, but doesn't yet have reliable baseline data. Once baseline data are available, this objective may be considered to become a core Healthy People 2030 objective.

Reference(s): (1) Razzaghi H, et al.. Morb Mortal Wkly Rep. 2020;69:1391-1397. https://www.cdc.gov/mmwr/volumes/69/wr/mm6939a2.htm. (2) US Department of Health and Human Services and Office of Disease Prevention and Health Promotion. December 2020. https://health.gov/healthypeople/objectives-and-data/browse-objectives/vaccination. Accessed 11 February 2021.

Healthy People 2030 Objectives: Childhood Vaccinations



Maintain vaccination coverage level of 1 dose-measles-mumps-rubella (MMR) vaccine among children by age 2 years[2]

Maintain vaccination coverage level of 2 doses MMR vaccine for children in kindergarten[2]

Increase vaccination coverage level of 4 doses-diphtheria-tetanus-acellular pertussis (DTaP) vaccine among children by age 2 years[2]

Baseline and Target 2020 VCR(s) obtained from the following: IID-7.1 (maintain an effective vaccination coverage level of 4 doses of the diphtheria-tetanus-acellular pertussis (DTaP) vaccine among children by age 19 to 35 months), IID-7.4 (maintain an effective vaccination coverage level of 1 dose of MMR vaccine among children by age 19 to 35 months), and IID-10.2 (maintain the vaccination coverage level of 2 doses of MMR vaccine for children in kindergarten).

Reference(s): (1) Office of Disease Prevention and Health Promotion. October 2020. https://www.healthypeople.gov/2020/topics-objectives/topic/immunization-and-infectious-diseases. Accessed 11 February 2021. (2) US Department of Health and Human Services and Office of Disease Prevention and Health Promotion. December 2020. https://health.gov/healthypeople/objectives-and-data/browse-objectives/vaccination. Accessed

Healthy People 2030 Objectives: Childhood Vaccinations

Reduce the proportion of children who received 0 doses of recommended vaccines by age 2 years.[1]

"Happy baby girl - Myrtle Beach State Park" by Ryan Smith Photography is licensed with CC BY-NC-ND 2.0. To view a copy of this license, visit https://creativecommons.org/licenses/by-nc-nd/2.0/

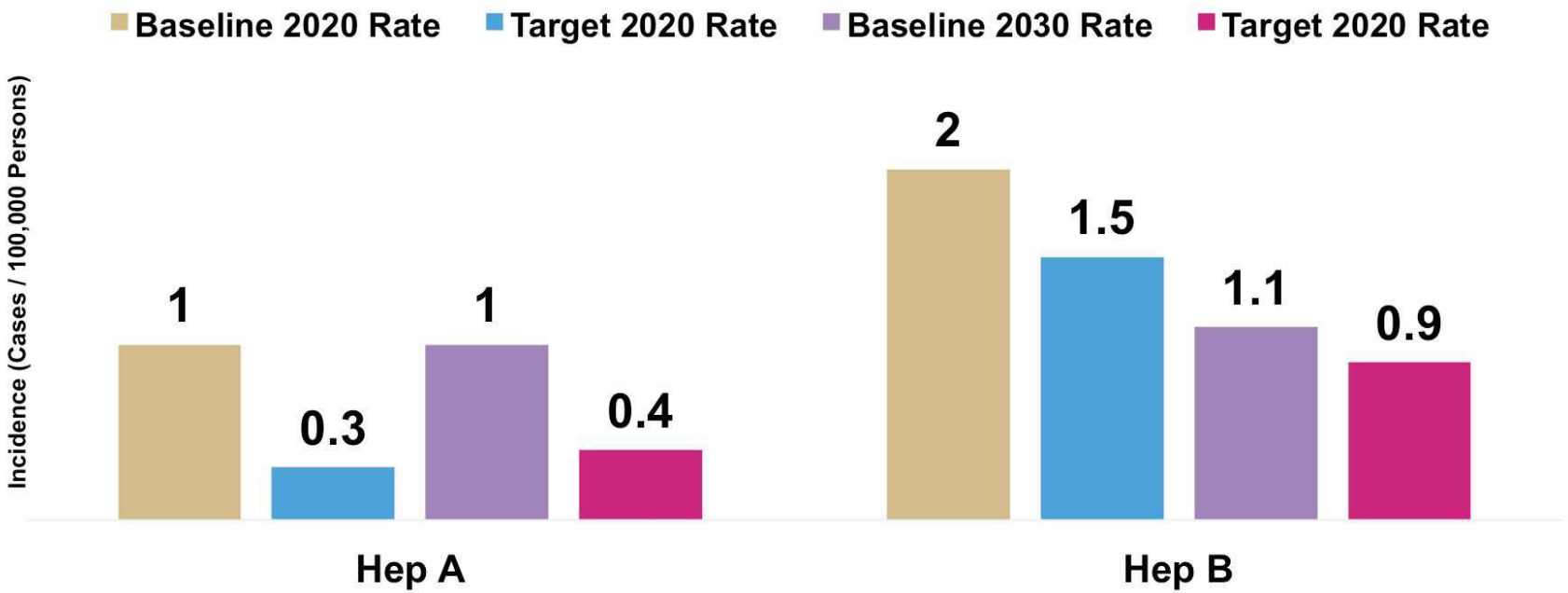
Baseline: 1.3% of children born in 2015 had received 0 doses of recommended vaccinations by their 2nd birthday[1]

Target: 1.3% (maintain baseline)[1]

Reference(s): (1) US Department of Health and Human Services and Office of Disease Prevention and Health Promotion. December 2020 https://health.gov/healthypeople/objectives-and-data/browse-objectives/vaccination. Accessed 11 February 2021.

Healthy People 2030 Objectives: Infectious Disease

Rates of Hepatitis A & B



Reduce the Rate of Hepatitis A[2]

Reduce the Rate of Hepatitis B[2]

Reference(s): (1) Office of Disease Prevention and Health Promotion. October 2020. https://www.healthypeople.gov/2020/topics-objectives/topic/immunization-and-infectious-diseases. Accessed 11 February 2021. (2) US Department of Health and Human Services and Office of Disease Prevention and Health Promotion. December 2020 https://health.gov/healthypeople/objectives-and-data/browse-objectives/vaccination. Accessed

Healthy People 2030 Objectives: Infectious Disease

Reduce infections due to HPV types prevented by the 9-valent vaccine in young adults[1]

Maintain the elimination of measles, rubella, congenital rubella syndrome (CRS), and acute paralytic poliomyelitis[1]

Increase the proportion of immunization information systems that track adult immunizations across the lifespan (Developmental)[1]

Increase the proportion of adults age 19 years or older who receive recommended age-appropriate vaccines (Developmental)[1]

Objective currently has developmental status, meaning it is a high-priority public health issue that has evidence-based interventions to address it, but doesn't yet have reliable baseline data. Once baseline data are available, this objective may be considered to become a core Healthy People 2030 objective.

Reference(s): (1)) US Department of Health and Human Services and Office of Disease Prevention and Health Promotion. December 2020 https://health.gov/healthypeople/objectives-and-data/browse-objectives/vaccination. Accessed 11 February 2021.

How HCPs Benefit From Healthy People 2030

Organizations across the country use Healthy People objectives to set their own priorities

Informational Flyer

Reference(s): US Department of Health and Human Services and Office of Disease Prevention and Health Promotion. December 2020. https://health.gov/healthypeople/tools-action/use-healthy-people-2030-your-work. Accessed 11 February 2021.

National Vaccine Advisory Committee's (NVAC) Standards for Adult Immunization Practice

National Adult and Influenza Immunization Summit (NAIIS) members call on providers across the healthcare spectrum to take actions to improve vaccination of adults

Assess

- Assess the vaccination status of patients at all clinical encounters

Utilize

- Utilize a jurisdiction's immunization information system (IIS) to view patients' prior vaccinations

Identify

- Identify vaccines patients need, then clearly recommend needed vaccines

Offer

- Offer needed vaccines or refer patients to another provider for vaccination

Document

- Document vaccinations given, including in the jurisdiction's IIS.

Measure

- Measure vaccination rates of providers' patient panels; making changes to clinic patient flow and addressing barriers

Reference: CDC. Adult Vaccination Resources. August 2021. https://www.cdc.gov/vaccines/hcp/adults/for-practice/increasing-vacc-rates.html. Accessed 9 March 2022

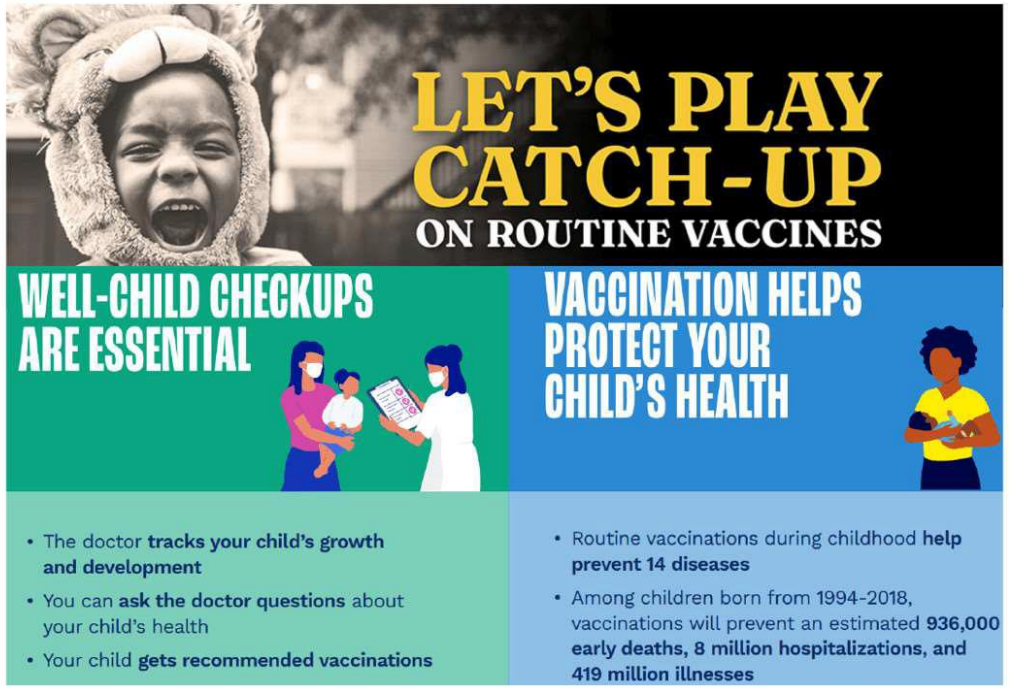
Catch Up on Well-Child Visits and Recommended Vaccinations

During the COVID-19

- pandemic families have been doing their part by staying at home as much as possible to help stop the spread of COVID-19
- many children missed check-ups and recommended childhood vaccinations

Return to school

- As children return to in-person learning and care, it's particularly important for parents to work with their child's doctor or nurse to make sure they get caught up on missed well-child visits and recommended vaccines.



CDC and the American Academy of Pediatrics (AAP) recommend every child continues to receive recommended vaccinations during the COVID-19 pandemic

Reference: CDC. Vaccines for Your Children. September 2021. Well-Child Visits and Recommended Vaccinations | CDC. Accessed 9 March 2022

CDC Child & Adolescent Immunization Schedules, 2022

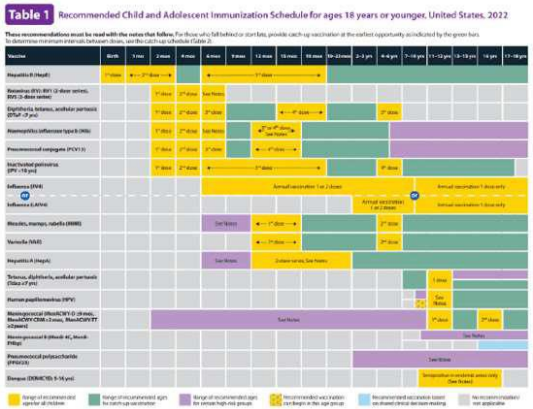


Table 1
Recommended Schedule
(Based on age)

Table 2
Catch-up Immunization Schedule
(Used for those who start late or are ≥1 month behind)

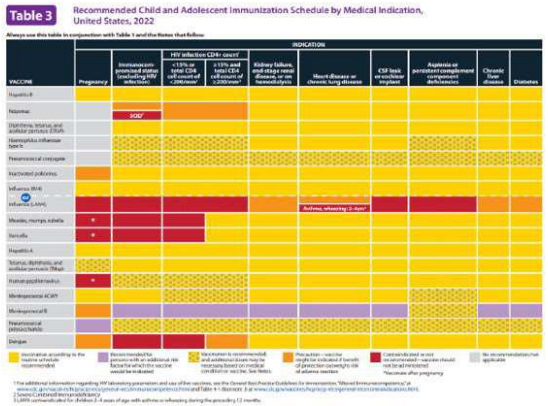


Table 3
Immunization Schedule by Medical Indication

How to use the child and adolescent immunization schedule

1 Determine recommended vaccine by age **(Table 1)**

2 Determine recommended interval for catch-up vaccination **(Table 2)**

3 Assess need for additional recommended vaccines by medical condition or other indication **(Table 3)**

4 Review vaccine types, frequencies, intervals, and considerations for special situations **(Notes)**

5 Review contraindications and precautions for vaccine types **(Appendix)**

Review vaccine types, frequencies, intervals, and considerations for special situations.

Reference: **1.** CDC. 2022. https://www.cdc.gov/vaccines/schedules/downloads/child/0-18yrs-child-combined-schedule.pdf Accessed 7 March 2022

Table 2: Catch-up Immunization Schedule

Table 2 Recommended Catch-up Immunization Schedule for Children and Adolescents Who Start Late or Who Are More than 1 Month Behind, United States, 2022

The table below provides catch-up schedules and minimum intervals between doses for children whose vaccinations have been delayed. A vaccine series does not need to be restarted, regardless of the time that has elapsed between doses. Use the section appropriate for the child's age. **Always use this table in conjunction with Table 1 and the Notes that follow.**

Children age 4 months through 6 years

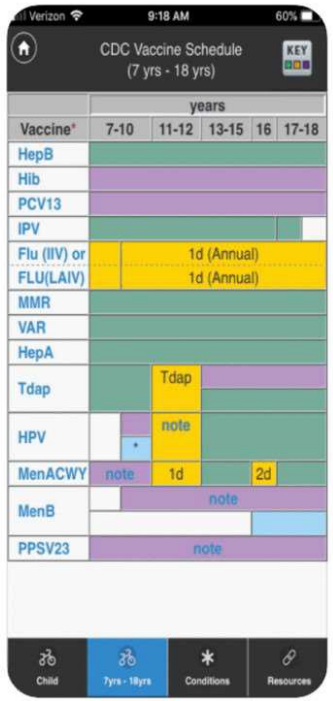
Vaccine	Minimum Age for Dose 1	Minimum Interval Between Doses			
		Dose 1 to Dose 2	Dose 2 to Dose 3	Dose 3 to Dose 4	Dose 4 to Dose 5
Hepatitis B	Birth	**4 weeks**	**8 weeks *and* at least 16 weeks after first dose** minimum age for the final dose is 24 weeks		
Rotavirus	6 weeks Maximum age for first dose is 14 weeks, 6 days.	**4 weeks**	**4 weeks** maximum age for final dose is 8 months, 0 days		
Diphtheria, tetanus, and acellular pertussis	6 weeks	**4 weeks**	**4 weeks**	**6 months**	**6 months**
Haemophilus influenzae type b	6 weeks	**No further doses needed** if first dose was administered at age 15 months or older. **4 weeks** if first dose was administered before the 1st birthday. **8 weeks (as final dose)** if first dose was administered at age 12 through 14 months.	**No further doses needed** if previous dose was administered at age 15 months or older **4 weeks** if current age is younger than 12 months ***and*** first dose was administered at younger than age 7 months ***and*** at least 1 previous dose was PRP-T (ActHib®, Pentacel®, Hiberix®), Vaxelis® or unknown **8 weeks *and* age 12 through 59 months (as final dose)** if current age is younger than 12 months ***and*** first dose was administered at age 7 through 11 months; OR if current age is 12 through 59 months ***and*** first dose was administered before the 1st birthday ***and*** second dose was administered at younger than 15 months; OR if both doses were PedvaxHIB® and were administered before the 1st birthday	**8 weeks (as final dose)** This dose only necessary for children age 12 through 59 months who received 3 doses before the 1st birthday.	
Pneumococcal conjugate	6 weeks	**No further doses needed** for healthy children if first dose was administered at age 24 months or older **4 weeks** if first dose was administered before the 1st birthday **8 weeks (as final dose for healthy children)** if first dose was administered at the 1st birthday or after	**No further doses needed** for healthy children if previous dose was administered at age 24 months or older **4 weeks** if current age is younger than 12 months and previous dose was administered at <7 months old **8 weeks (as final dose for healthy children)** if previous dose was administered between 7–11 months (wait until at least 12 months old); OR if current age is 12 months or older and at least 1 dose was administered before age 12 months	**8 weeks (as final dose)** This dose only necessary for children age 12 through 59 months who received 3 doses before age 12 months or for children at high risk who received 3 doses at any age.	
Inactivated poliovirus	6 weeks	**4 weeks**	**4 weeks** if current age is <4 years **6 months (as final dose)** if current age is 4 years or older	**6 months (minimum age 4 years for final dose)**	
Measles, mumps, rubella	12 months	**4 weeks**			
Varicella	12 months	**3 months**			
Hepatitis A	12 months	**6 months**			
Meningococcal ACWY	2 months MenACWY-CRM 9 months MenACWY-D 2 years MenACWY-TT	**8 weeks**	See Notes	See Notes	

Reference: **1.** CDC. 2022. https://www.cdc.gov/vaccines/schedules/downloads/child/0-18yrs-child-combined-schedule.pdf Accessed 7 March 2022

Additional Tools for HCP for Immunization Catch-Up

1. CDC Vaccine Schedules App[1]

CDC Vaccine Schedules 12+
Centers For Disease Control and Prevention



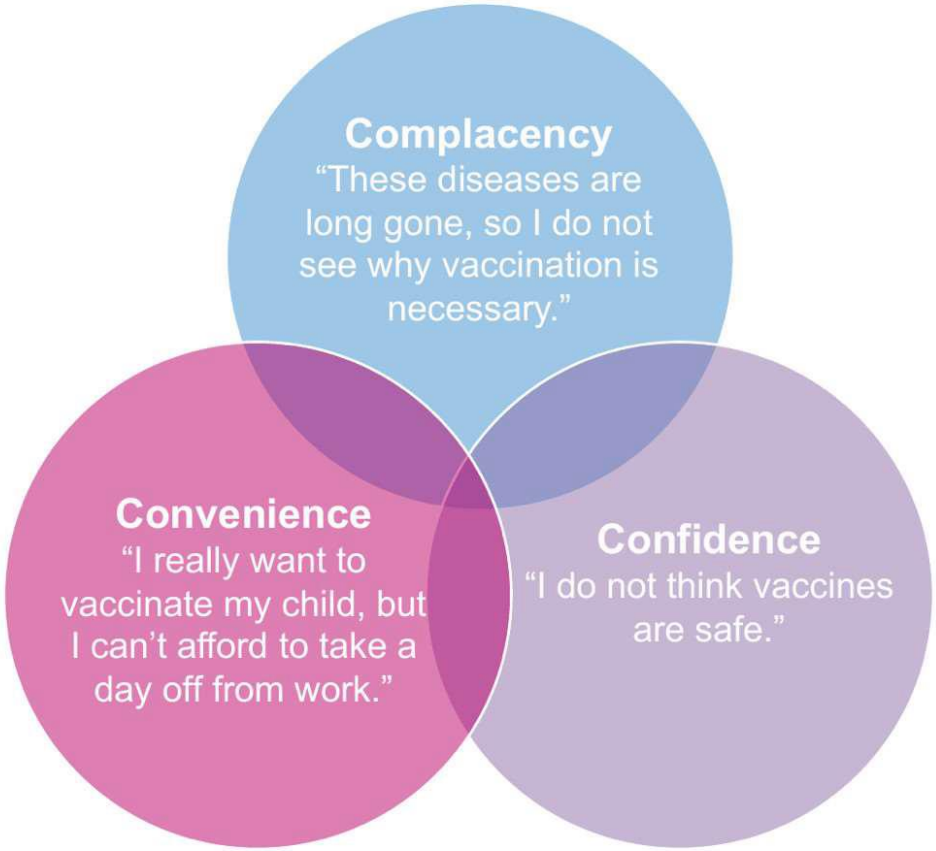
2. CDC has developed Catch-up Guidance Job Aids to assist HCPs[2]

- The aids are to be used to interpret Table 2 of the child & adolescent immunization schedule
- The aids are based on an individual's CURRENT age

References: 1. CDC. 2022 https://www.cdc.gov/vaccines/schedules/hcp/schedule-app.html Accessed 7 March 2022 **2.** CDC. Immunization Schedules. 2022. https://www.cdc.gov/vaccines/schedules/hcp/imz/catchup.html Accessed 7 March 2022

What is Vaccine Hesitancy?

- Vaccine hesitancy refers to delay in acceptance or refusal of vaccination despite availability of vaccination services
- Vaccine hesitancy is complex, context specific, varying across time, and vaccine specific
- It is influenced by factors such as **complacency, convenience** and **confidence**



Reference: WHO. Vaccination and trust. 2017. https://www.euro.who.int/__data/assets/pdf_file/0004/329647/Vaccines-and-trust.PDF . Accessed 1 March 2022.

World Health Organization: Urgent Global Health Challenges in 2020s

- Climate crisis
- Health care delivery in areas of conflict
- Underinvestment in health workers
- Threat of antimicrobial resistance
- Harnessing new technologies
- Expanding access to medicines
- **Earning public trust**
- Stopping infectious diseases
- Health care equity
- Epidemic preparedness
- Unsafe products
- Adolescent safety
- Health care sanitation

"Public health is compromised by the uncontrolled dissemination of misinformation in social media, as well as through an erosion of trust in public institutions. **The anti-vaccination movement has been a significant factor** in the rise of deaths in preventable diseases." - WHO

Reference: WHO. January 2020. https://www.who.int/news-room/photo-story/photo-story-detail/urgent-health-challenges-for-the-next-decade. Accessed 16 February 2022.

Erosion of Vaccine Confidence

Types of events that may erode trust include:

- Vaccine **reactions**
- Events that are not causally linked with vaccination but are believed to be so (by the public, media or healthcare workers)
- Critical media **reports**
- Social media **stories** or **rumors**
- New critical **studies**
- Vaccine **recalls** or temporary **suspensions** of a vaccine
- **Replacements** of one vaccination product (producer) with another

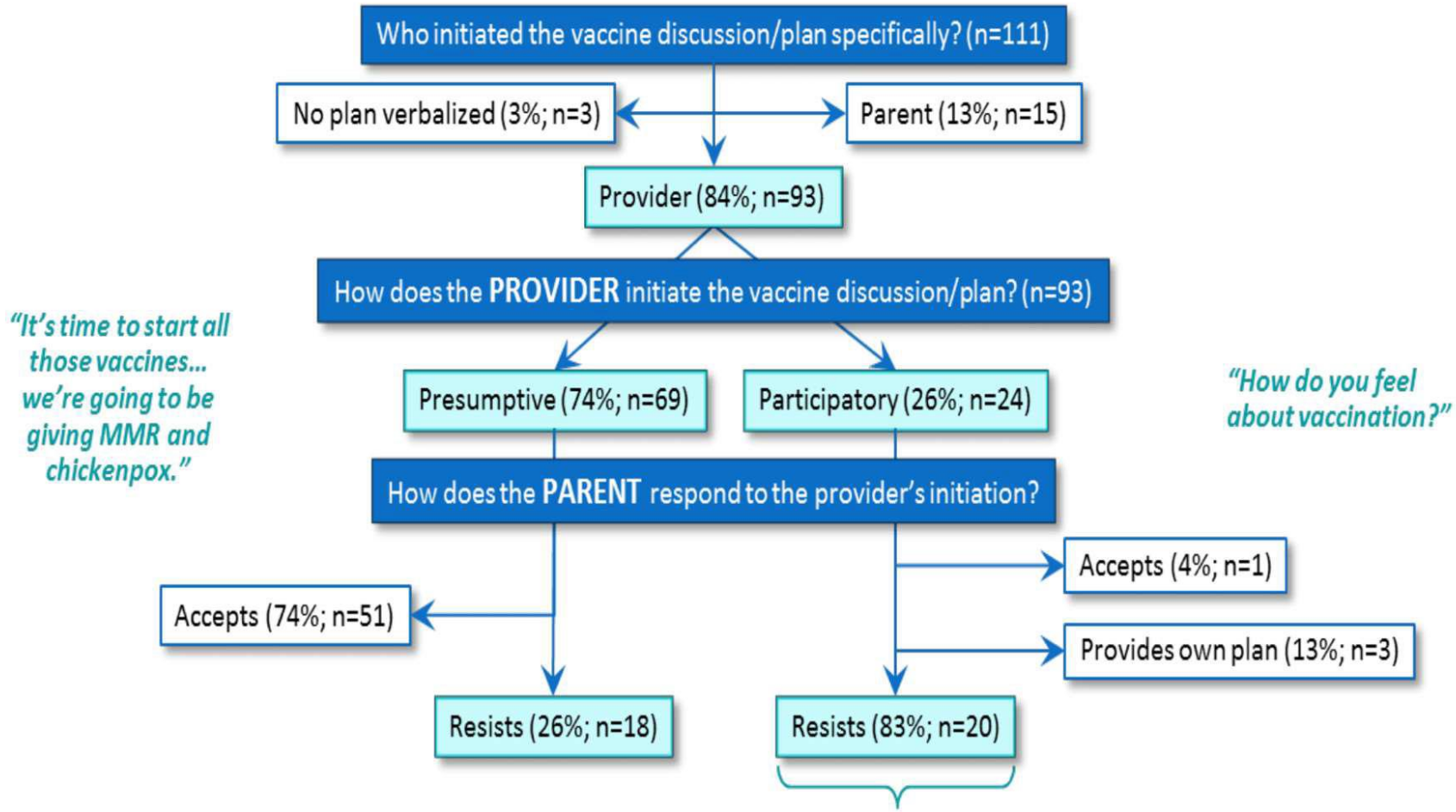
Reference: WHO. Vaccination and trust. 2017. https://www.euro.who.int/__data/assets/pdf_file/0004/329647/Vaccines-and-trust.PDF . Accessed 1 March 2022.

How to Broach the Topic of Vaccines With Parents

1. Use a presumptive format. Presupposes patient will be immunized, increasing the likelihood of vaccine acceptance.
2. Avoid a participatory format. Implies that choosing not to vaccinate is medically acceptable.
3. Be persistent in cases of initial resistance (e.g., “He really needs these shots” or “If she were my child, I’d definitely go ahead”).

References: 1. Opel DJ, et al. *Pediatrics.* 2013;132(6): **2.** Opel DJ, et al. *Am J Public Health.* 2015;105(10):1998-2004.

Don't Be Afraid to Use a Presumptive Approach to Immunization Communication: Be a Champion for Vaccination



[a]Reproduced with permission from *Pediatrics*, Vol. 132, Pages 1037-1046, Copyright © 2013 by the American Academy of Pediatrics.

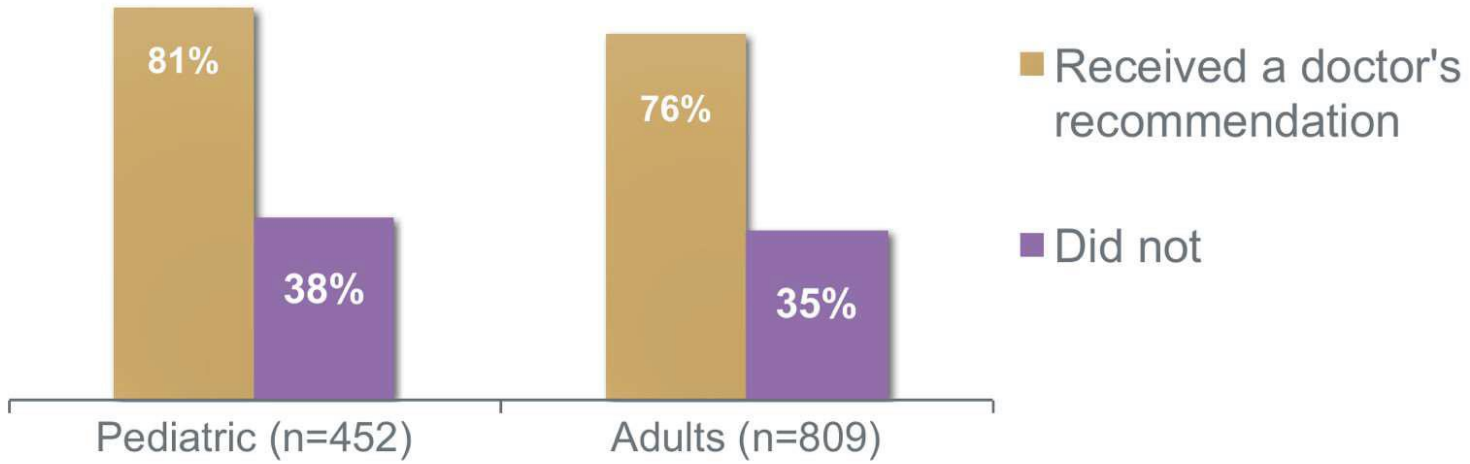
Reference: 1. Opel DJ, et al. *Pediatrics*. 2013;132(6):1037-1046.

HCP Recommendations Drive Flu Vaccinations

Percent Receiving Vaccination in Doctor's Office

73%	53%
Pediatric (n=427)	Adults (n=835)

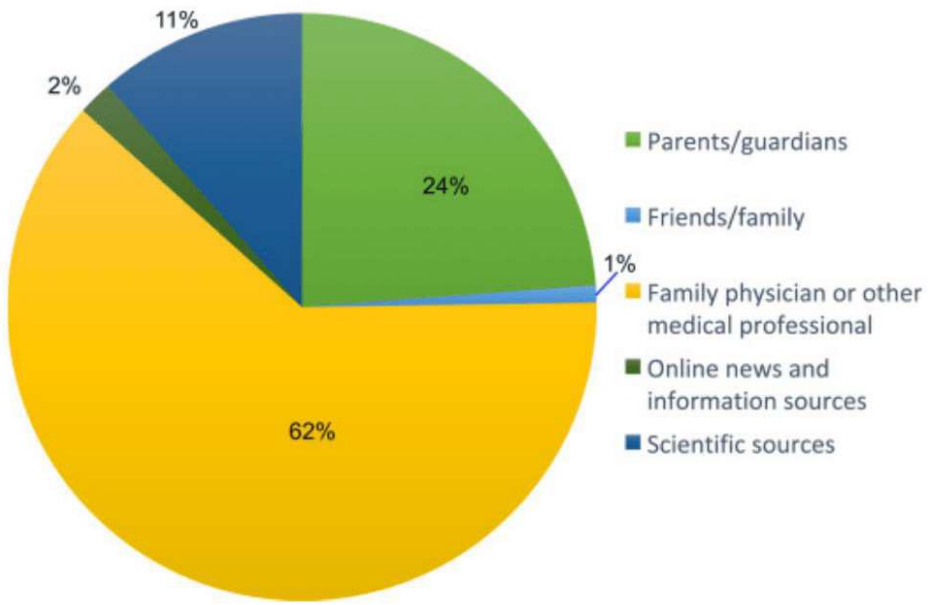
Percent Receiving Vaccination With and Without a Doctor's Recommendation



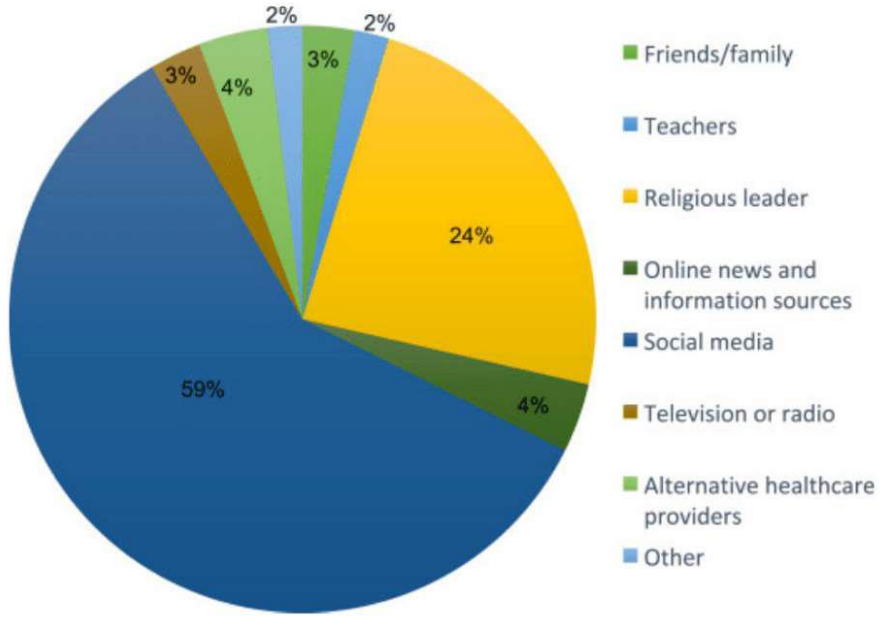
Reference: Sanofi Pasteur. Data on file (2015-2016 National consumer influenza immunization study: immunization trends), July 2016. MKT32484.

HCP: Adolescents Most Important Source of Information About Vaccines

Adolescents identified physicians as their primary and most trusted source of information about vaccines.



Trusted sources for vaccine information (n = 105)



Least trusted sources for vaccine information (n = 105)

Methods: A cross-sectional survey of public high school students using a paper-based questionnaire in a region with a high rate of vaccine acceptance to assess sources they trusted most for vaccine information was conducted. Surveys were administered over a one-week period in the fall of 2017.
Limitations: small sample size, only obtained parental consent and student assent from a subset of students given the forms and not all students successfully completed the questionnaire, selection bias likely occurred regarding which students took consent forms to their parents, which parents agreed to allow their child to participate in a study on vaccination, and which students took the time to return a completed questionnaire, limited demographic data was collected, study was only conducted at one school in a region of high vaccine acceptance.

Reference: 1. Griffin DS, et.al. Heliyon. 2018;4(12):e01006.

For More Information

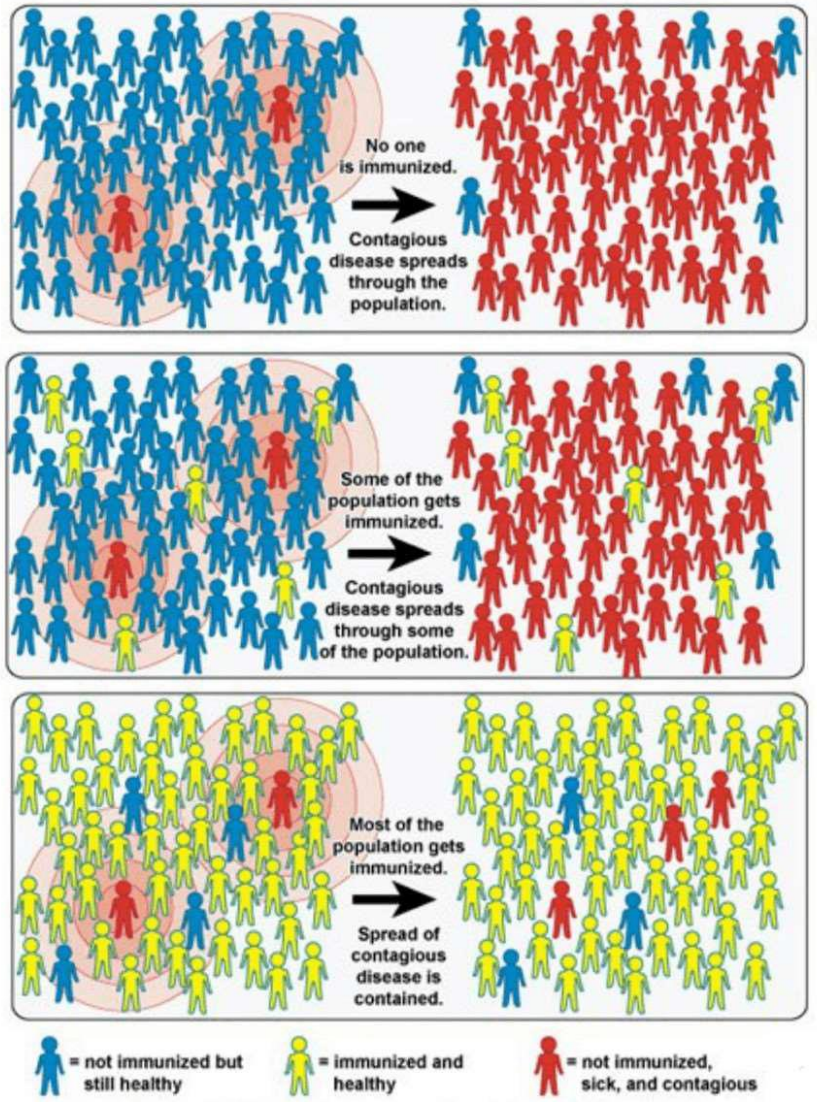
- Centers for Disease Control and Prevention: ***https://www.cdc.gov/vaccines/adults/index.html***
- Immunization Action Coalition: ***http://www.immunize.org/handouts/adult-vaccination.asp***
- National Adult and Influenza Immunization Summit: ***https://www.izsummitpartners.org/adult-immunization-standards/***
- National Adult Vaccination Program (NAVP): ***https://www.navp.org/***

Online Vaccine Hesitancy E-Modules

Visit vaccines.com and click on “online learning for healthcare providers” to access free e-modules related to vaccine hesitancy

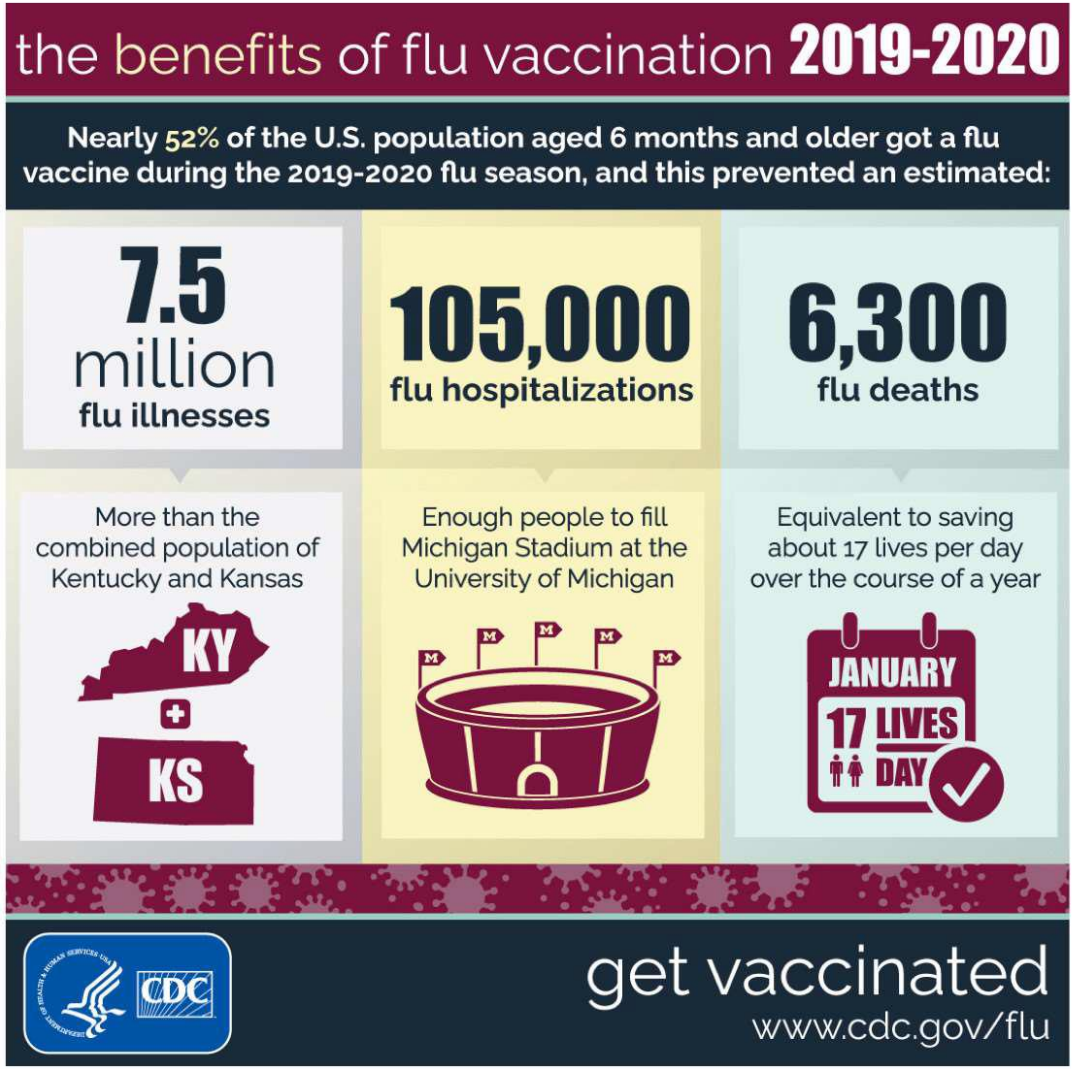
Other Considerations: Herd Immunity/Community Protection

- R_0 = Basic Reproductive Number = Herd Immunity Threshold[1]
- Vaccination provides indirect protection of non-immune individuals by the presence and proximity of immune persons[2]
- Protects those too young for vaccination, immunocompromised or those unable to get vaccine due to contraindications[2]



References: **1**. Metcalf et al. *Trends in Immunol*, Dec 2015, 36(12): 753-755. **2.** Vaccines Plotkin Chapter 77 Community Protection 7th Edition. Image from: https://www-tc.pbs.org/wgbh/nova/media/images/herd-immunity-01.width-2500.jpg Accessed 5 May 2020

Influenza Disease Burden Averted Due to Vaccination



Reference: Infographic from CDC : https://www.cdc.gov/flu/about/burden-averted/2019-2020.htm, Accessed 19 Nov, 2020

Summary

- Prior to the COVID-19 pandemic, routine vaccination rates had stalled, and instances of vaccine preventable outbreaks were increasing[1]
- COVID-19 pandemic is declared in March 2020 halting numerous mass vaccination clinics and routine primary care visits[2]
- Routine vaccination rates initially plummet at start of COVID-19 pandemic, and we have yet to see full recovery to pre-pandemic vaccination rates[3,4]
- Purposeful actions like **National Vaccine Advisory Committee's (NVAC) Standards for Adult Immunization Practice** and **CDC catch-up schedules** are needed to get routine vaccines back on track

We cannot let the COVID-19 pandemic unravel years of progress in routine immunization and expose millions to deadly, preventable diseases[1]

Reference: **1.** WHO. July 2021. https://www.who.int/news/item/15-07-2021-covid-19-pandemic-leads Accessed 8 March 2022. **2.** WHO. May 2020. https://www.who.int/news/item/22-05-2020-at-least-80-million-children . Accessed 8 March 2022. **3.** Murthy BP et al. MMWR Morb Mortal Wkly Rep 2021;70:840–845. Accessed 7 March 2022 **4.** Liow, C et al.Avalere. January 2022. https://avalere.com/insights/declines-in-routine-adult-and-teen-vaccinations-continued-in-2021 Accessed 8 March 2022

MSL-TITLE-004 - P - DISTRIB - EXP 3/19/23

Thank you!

For more information on this topic or other vaccine-preventable illnesses, please contact

sanofi

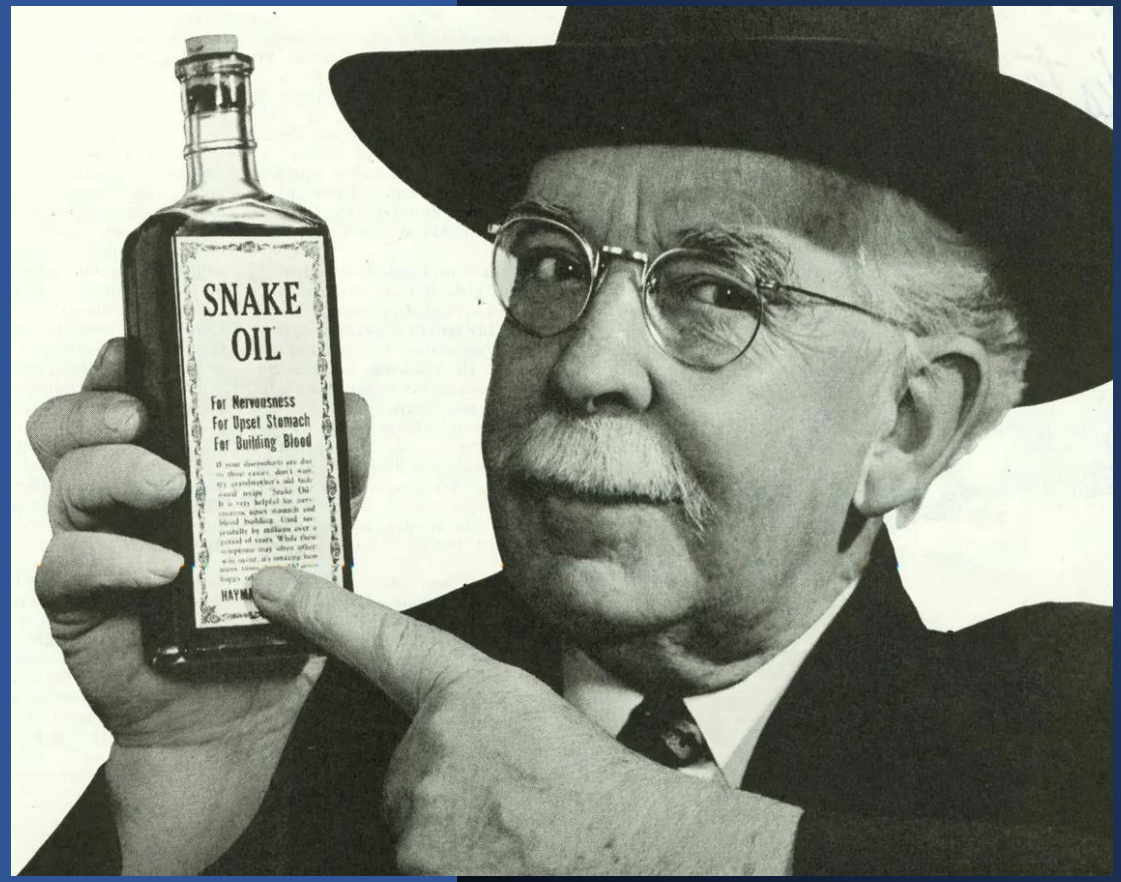
Helene Janosczyk
helene.janosczyk@sanofi.com

Stories From the Frontline

Eric Berger, MD
General and Developmental Pediatrician
Managing Partner

Disclaimers and Disclosures

- I'm not an expert in behavioral change
- I'm not an expert in logistics and systems
- I'm not a vaccine expert!



- Approximately 11,0000 patients ---- 11 Providers
- NCQA top tier since 2011
- Blue Cross Highest Performing Practice over 10 years
- PDOH Metrics– consistently beating city averages in vaccine metrics (for all but 1 shot– more to come on this!)

You must lead the horse to water ---

No chance if you don’t get them there

Swiss Cheese Model

*Appointment Reminders

*Immunization Reports

*Well Visit Reports

Monthly Immunization Reports

Immunizations: - At 13 months - At 27 months	TO TRACK PATIENTS AT 2 DIFFERENT AGE RANGES: 1. 13-27 MONTHS 2. 27-72 MONTHS BEHIND ON ANY AAP RECCOMENDED VACCINES.	Step 1: RUN MONTHLY REPORTS TO CAPTURE ANY PATIENTS NEEDING VACCINES. Step 2: SEND THEM AN EMAIL AND TEXT MESSAGE LETTING THEM KNOW THEY ARE BEHIND. Step 3: SCHEDULE AN APPOINTMENT TO COME IN TO RECEIVE ANY VACCINATIONS THEY ARE BEHIND ON.

Twice Yearly Well Visit Reports

Well Visits: - 0-2 years - 2-6 years - 6-13 years - OVER 13	TTO TRACK PATIENTS IN 4 DIFFERENT AGE GROUPS: 1. 0-2 YEARS 2. 2-6 YEARS 3. 6-13 YEARS 4. OVER 13 TO FIND ANYONE THAT IS BEHIND ON WELLNESS CARE.	**Step 1:** RUN BIANNUAL REPORTS TO CAPTURE ANY PATIENT BEHIND ON WELNESS CARE. **Step 2:** SEND THEM AN EMAIL AND TEXT MESSAGE LETTING THEM KNOW THEY ARE BEHIND. **Step 3:** SCHEDULE THEM AN APPOINTMENT TO COME IN TO SEE THEIR PREFERRED PROVIDER FOR A WELLNESS CHECK.

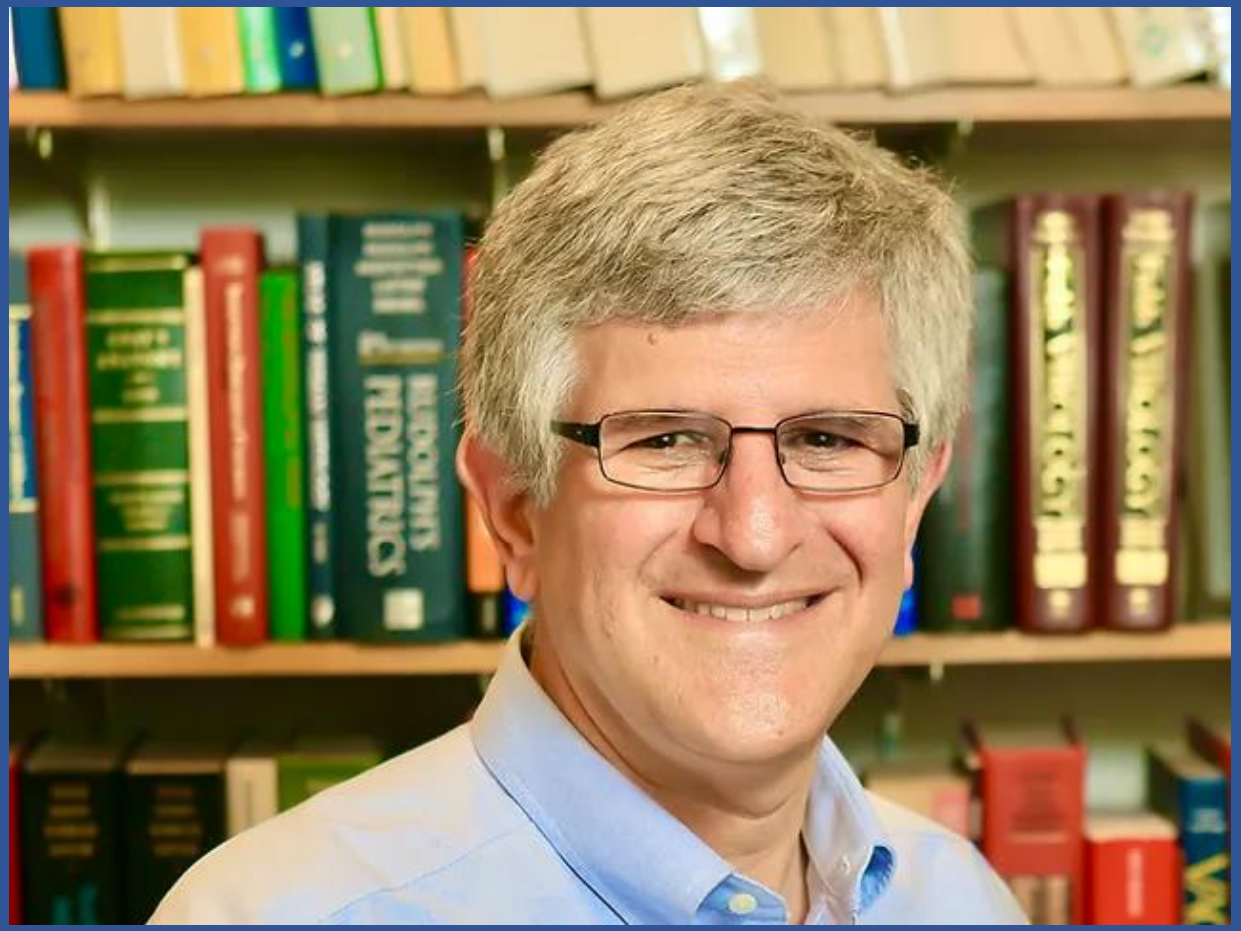
It is not enough

Who Do You Believe???

What does it take??

- **Knowledge**
- **Empathy**
- **Carrots**
- **Sticks**

THE MAN

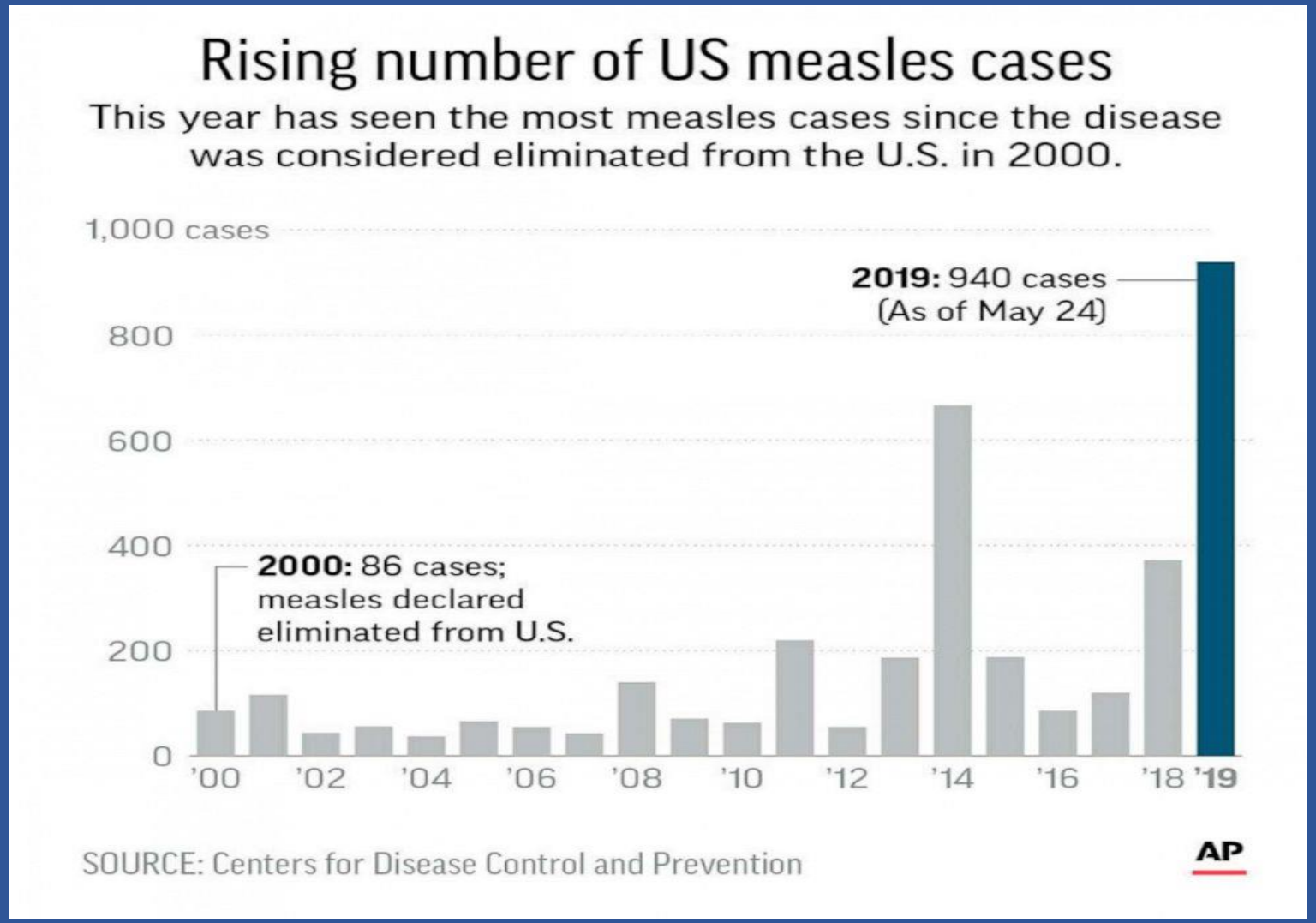


The Clown (of late 90's)

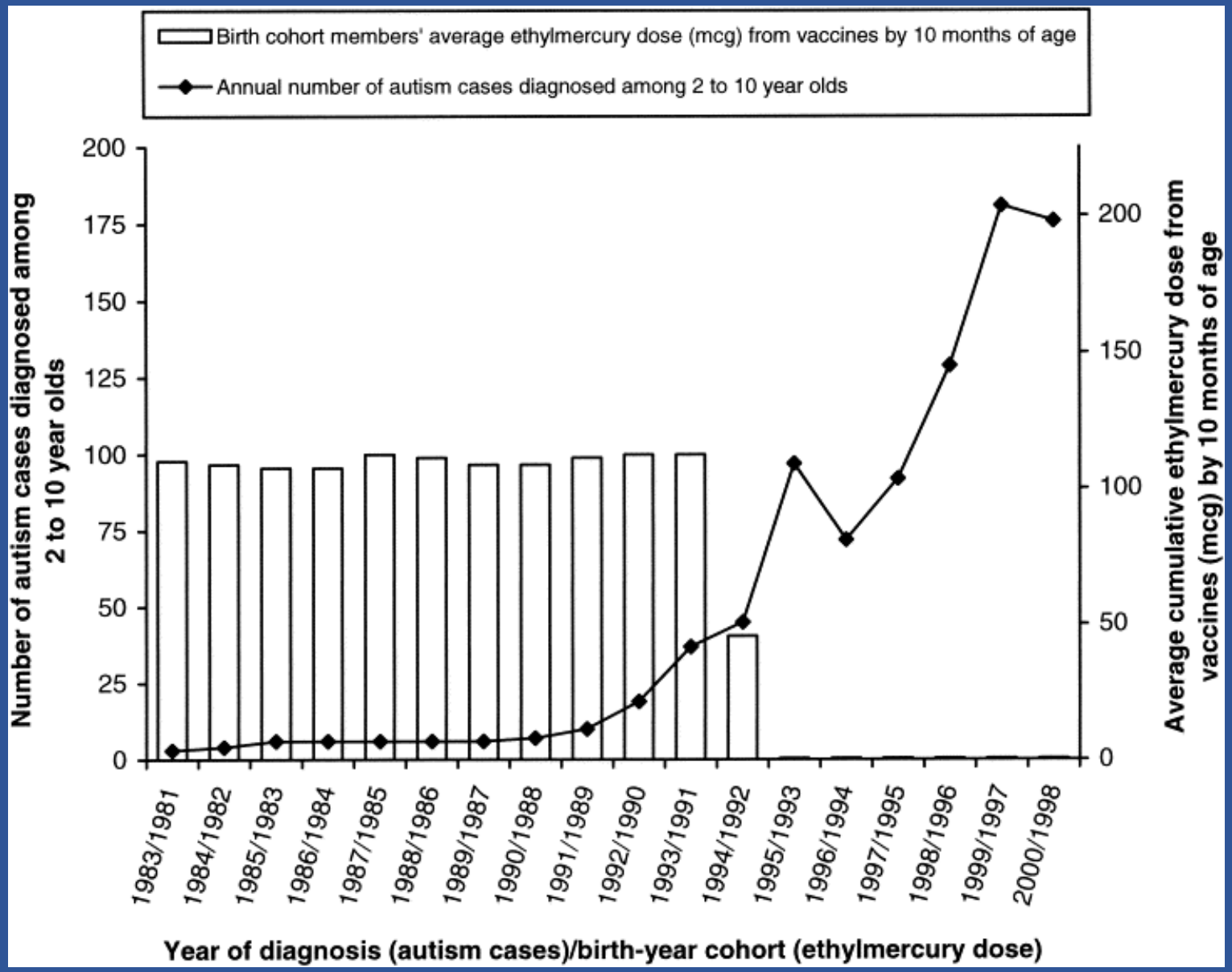
Now it's even worse :

Pandemic of misinformation and distrust

Falling Vaccine Rates



Vaccine Additives



Resources


Vaccine Education Center
The Vaccine Education Center at Children's Hospital of Philadelphia provides complete, up-to-date and reliable information about vaccines to parents and healthcare professionals. We are a member of the World Health Organization's (WHO) Vaccine Safety Net because our website
CONTACT US
VACCINE EDUCATION CENTER
Type here to search

Knowledge is Not Enough
CCP meet CNN

What a Swell Guy

Robert W. Sears, MD, is a father of three, practicing pediatrician, and a co-author in the Sears Parenting Library. "Dr. Bob", as he likes to be called by his little patients, earned his medical degree at Georgetown University School of Medicine in 1995. He did his pediatric internship and residency at Children's Hospital Los Angeles, finishng in 1998.

He has a passion for healthy natural living and incorporates this knowledge into a style of disease treatment and prevention that you won't find in most doctors offices. By limiting antibiotic use, using science-based natural treatment approaches whenever possible, and focusing on good nutrition and immune system health, Dr. Bob takes preventative medicine to a whole new level. His commitment to breastfeeding success for all his patients also helps babies get a right start in life.

Dr. Bob is committed to enjoying a slow-paced, casual atmosphere in the office, providing long checkups, giving parents the flexibility to ask for house calls at home when needed and being one of the very few Orange County pediatricians to be available after hours, overnight, and on weekends for phone calls and home visits. Because he is not contracted with any insurance companies he is able to focus his attention 100% on just being a doctor without having to worry about the business side of running an insurance-based office. His patients take care of billing their own insurance themselves and find that once they learn the process it is very easy.

Empathy

Vaccines are scary BUT…… What's the alternative?

Measles

Chicken Pox

Pneumococcal Disease

HIB Disease

Pertussis

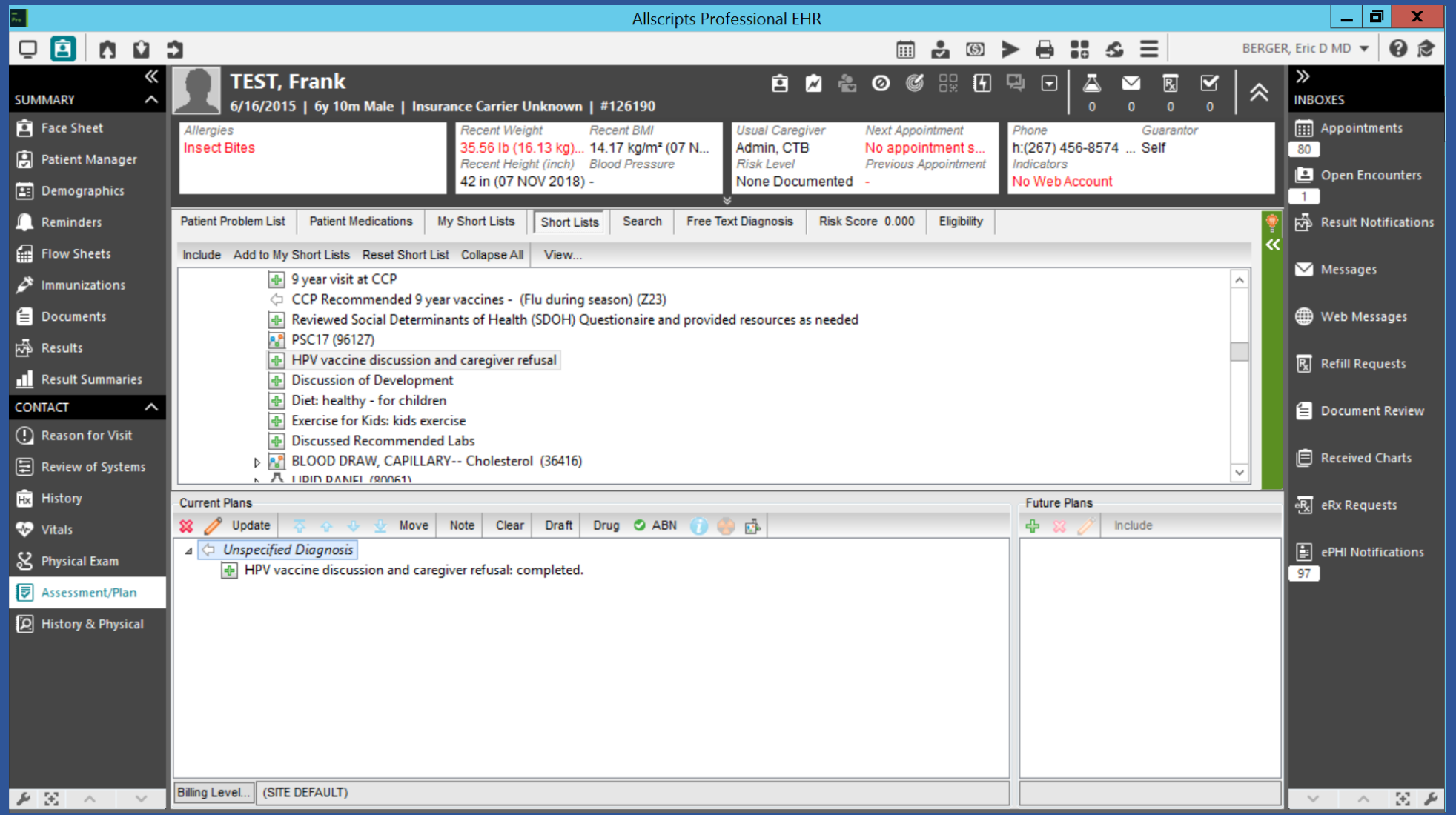
COVID (myocarditis, "long covid')

Carrots and Sticks

Center City Pediatrics Mandatory (Minimum) Vaccine Compliance Schedule

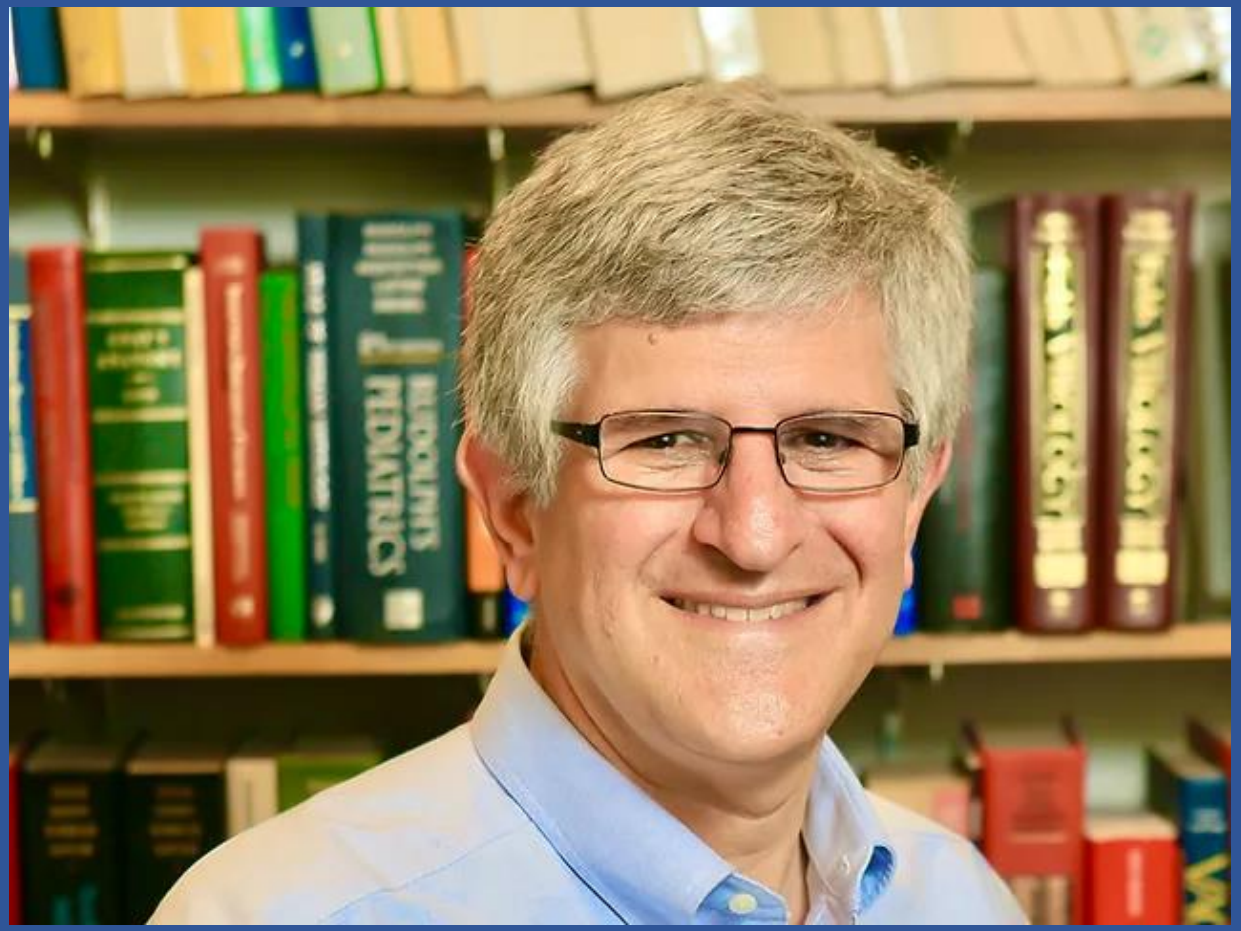
Maximum Age Limit	HiB (4-dose)	DTaP (or Tdap)	PCV13 (Prevnar-	MMR	Varicella
3 months, 0 days	Dose #1	Dose #1	Dose #1		
5 months, 0 days	Dose #2	Dose #2	Dose #2		
7 months, 0 days	Dose #3	Dose #3	Dose #3		
16 months, 0 days	Dose #4		Dose #4	Dose #1	Dose #1
19 months, 0 days		Dose #4			
7 years, 0 days		Dose #5		Dose #2	Dose #2
13 years, 0 days		Tdap			

The Challenge of HPV



THIS GUY?

THE MAN?



THE COACH

- Try to be knowledgeable
- Never dismissive/ Remain Curious/ Empathetic
- Be affable and optimistic about benefits
- Make the hard decisions when you must!

www.centercitypediatrics.com

THANK YOU!!

Vaccine Equity: Panel

Dr. Frank Franklin, PhD, JD, MPH
Deputy Health Commissioner
Philadelphia Department of Public Health

Tasia Fauntleroy
Health Equity Program Manager
Division of Disease Control
Philadelphia Department of Public Health

Hassan Freeman
Director of Community Engagement
PhillyCounts
City of Philadelphia

THANK YOU

Contact Sabrina.Gattine@phila.gov with any questions.