2026 Head for the Hills Conference
Marion, VA

Vaccine Hesitancy

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It's your story. We're listening.

Ballad Health Research Institute
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Disclosure

The presenter(s) for today's session:
Quincy J. Byrdsong, EdD, DMin, CCRP

☒ I have no relevant financial relationship in relation to this educational activity. This educational activity represents my thoughts and opinion and not those of any organization I represent.

□ I/We have relevant financial relationship(s) with respect to this educational activity with the following organizations (list here):

{Role, Organization}

Learning Objectives

Upon completion of this presentation, attendees should be able to:

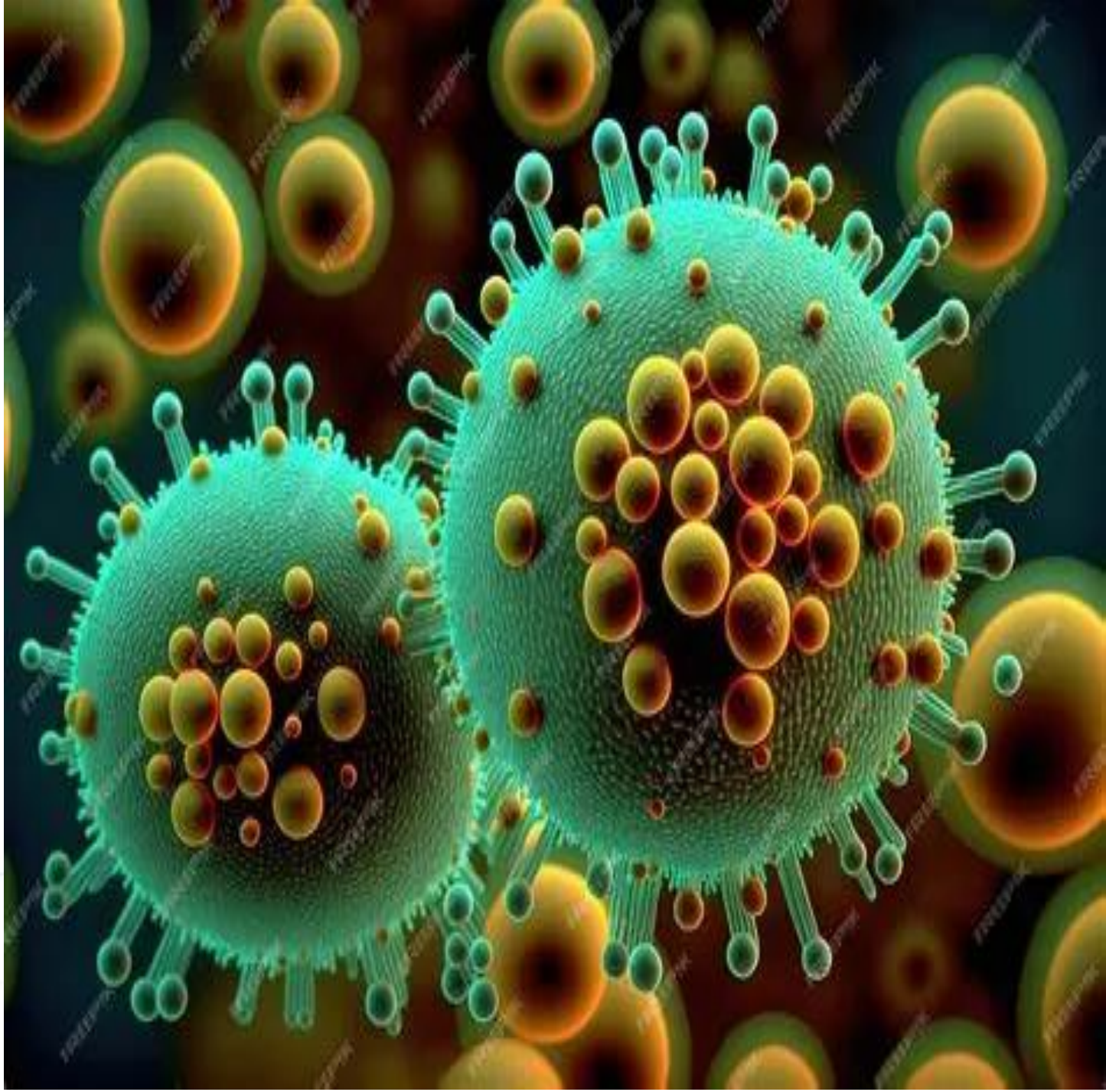
- Define vaccination and trace its origin in addressing public health
- Explain vaccine hesitancy and identify its contributing factors
- Identify strategies to educate the general public and mitigate vaccine hesitancy

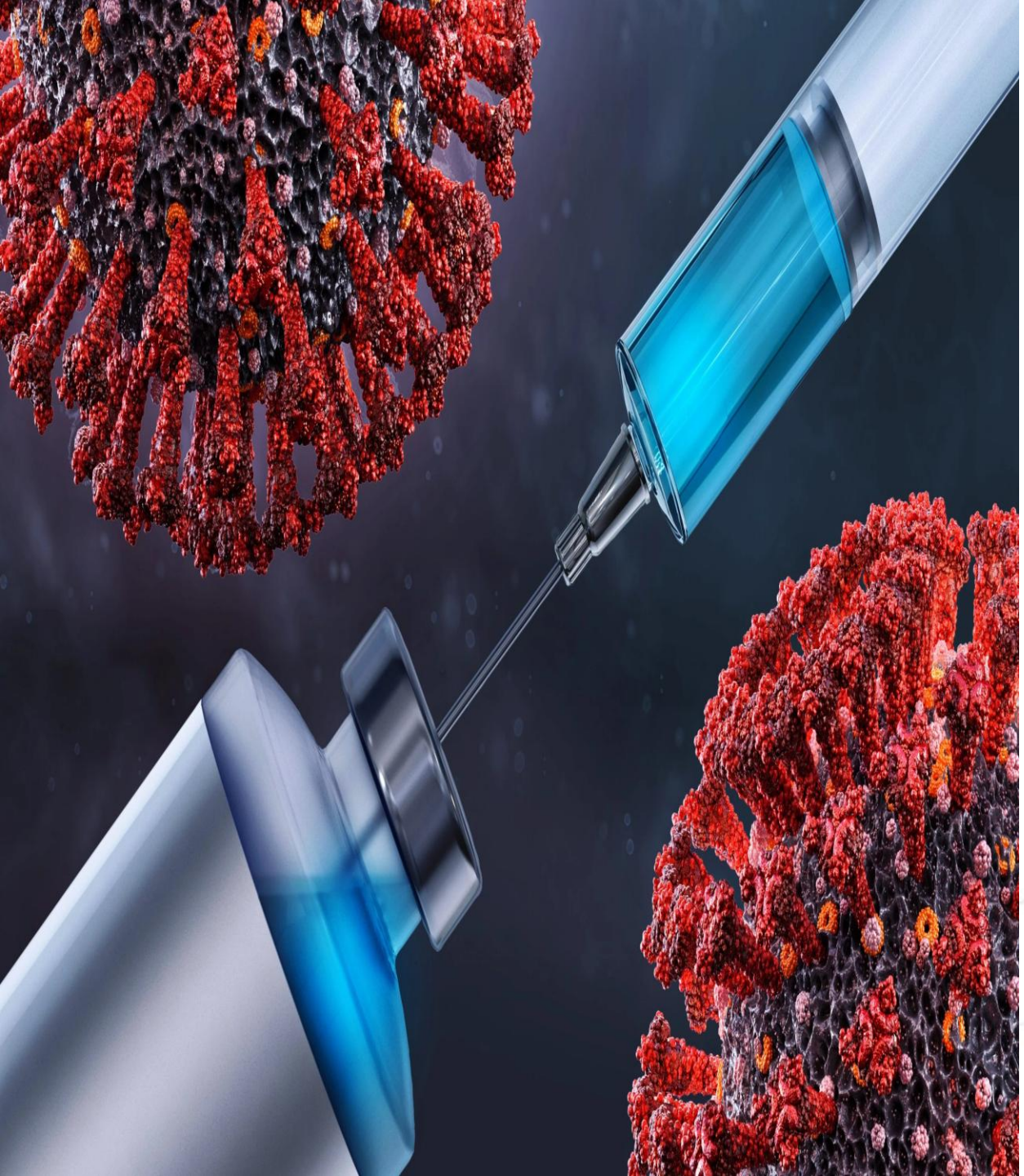


Vaccination

https://www.who.int/news-room/questions-and-answers/item/vaccines-and-immunization-what-is-vaccination

Definition: A simple, safe, and effective way of protecting people against harmful diseases using body's natural defenses, before they come into contact with them.





How Vaccines Work

https://www.who.int/news-room/questions-and-answers/item/vaccines-and-immunization-what-is-vaccination

After receiving a vaccine, the immune system responds by:

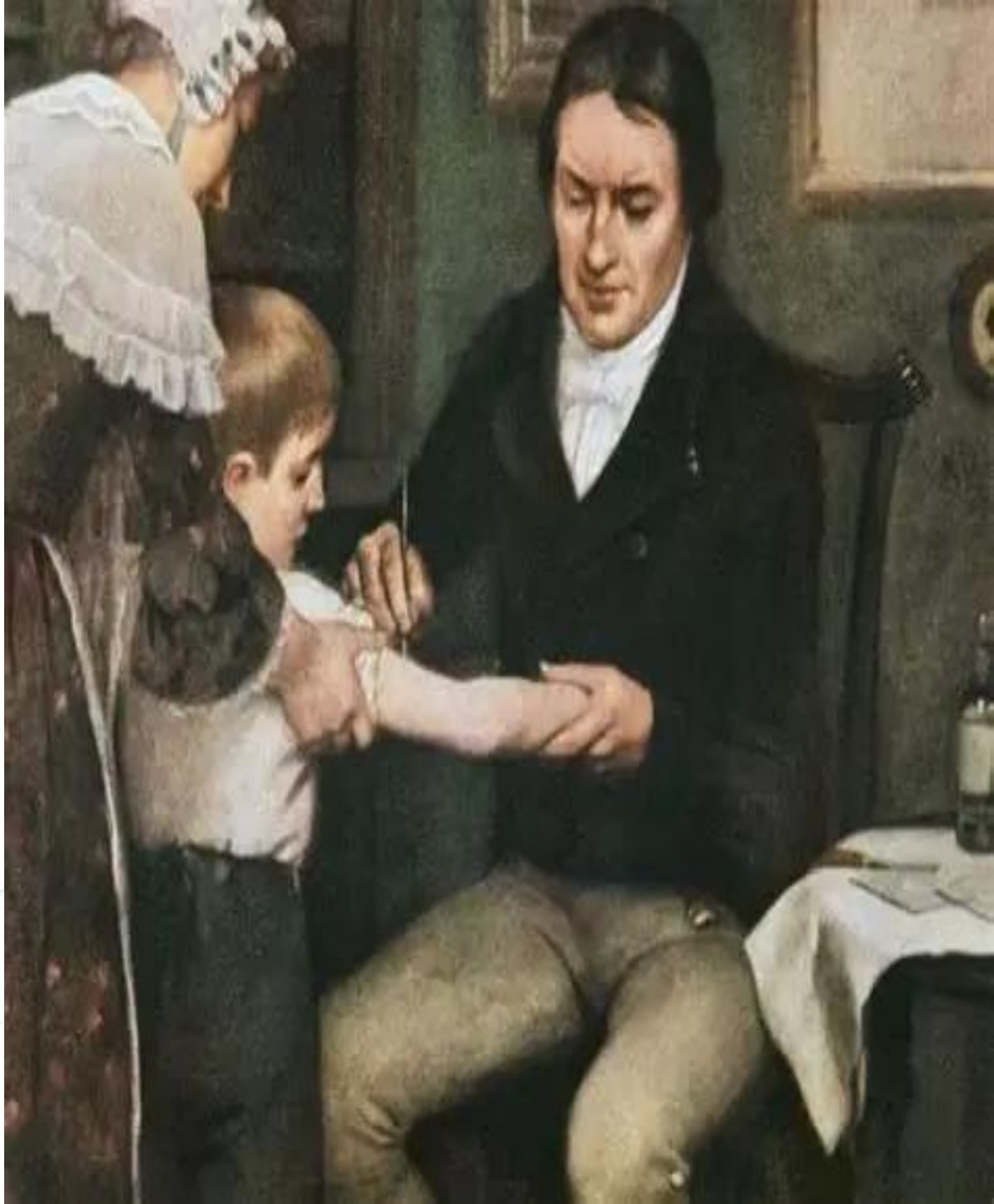
- recognizes the invading germ
- produces antibodies, proteins produced naturally to fight disease
- remembers the disease and how to fight it so if exposed to the germ in the future, the immune system can quickly destroy it before you become unwell

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Origin of Vaccines: Edward Jenner

https://historyofvaccines.org/history/vaccine-timeline/overview/?ref=nf

Edward Jenner observed that milkmaids and others previously infected with cowpox were immune to smallpox. Cowpox caused lesions similar to smallpox, but the lesions were localized, and the disease was much milder and not considered deadly. Jenner devised a series of experiments in which a person who had not previously acquired smallpox nor cowpox would be inoculated first with cowpox and later with smallpox.





Origin of Vaccines: Louis Pasteur

https://historyofvaccines.org/history/vaccine-timeline/overview/?ref=nf

Pasteur theorized that something in the saliva of the rabid animals was causing rabies. The rabies virus was too infectious, too virulent. As a result, Pasteur approached the problem differently: weaken the infectious agent somehow before giving it to a person. It was believed the drying caused the material to be less virulent, so Pasteur tried this with the brains and spinal cords of infected rabbits then exposed the vaccine to humans successfully.

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Herd Immunity

https://my.clevelandclinic.org/health/articles/22599-herd-immunity

Herd immunity — also called population immunity — often results from a combination of people getting vaccinated and people getting infected with the germ (natural immunity). Both natural and vaccine immunity cause your body to make antibodies and immune cells that recognize a specific germ. Herd immunity produces elimination, eradication, and protection.



What is Vaccine Hesitancy?



What is vaccine hesitancy?

https://www.who.int/



-A delay in acceptance or refusal of vaccines, despite availability of vaccination services
-Complex and context specific, varying across time, place and vaccine

Why Vaccine Hesitancy?

The Three C's

Confidence
Complacency
Convenience





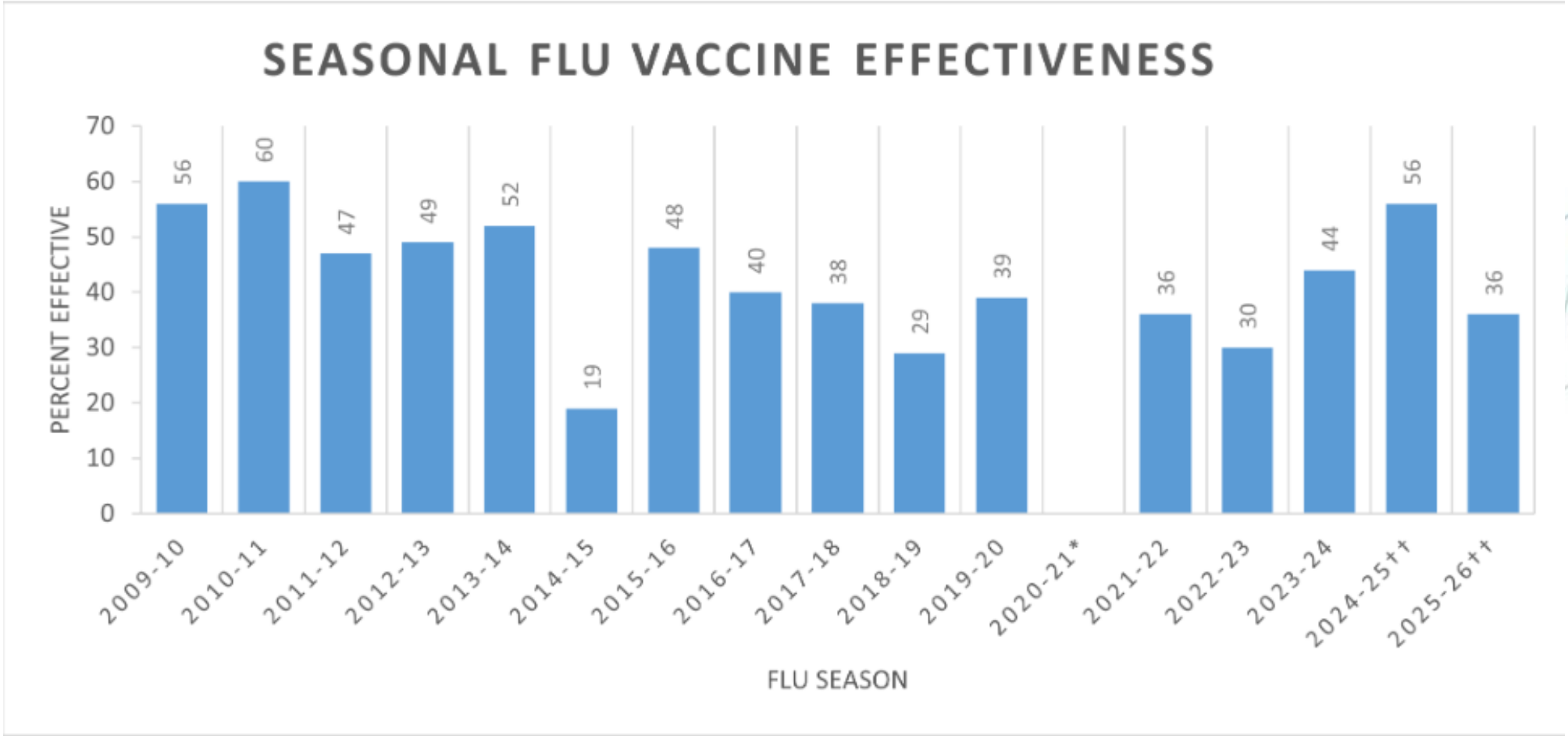
Confidence

https://www.who.int/

- Trust in the vaccine
- Trust in the system
- Trust in authority

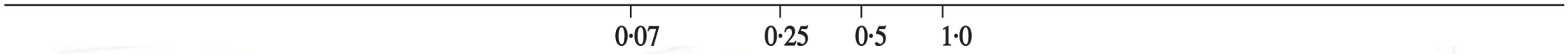
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Flu Vaccine Effectiveness: 2009 - present



HPV Vaccine Effectiveness by Age

	Cases	Controls	OR (95% CI)	VE (95% CI)	P-value
Overall Vaccine Effectiveness					
≥1 dose of HPV vaccine (unadjusted)	132	392	0·53 (0·31, 0·91)	46·7% (9·5%, 68·6%)	0·020
≥1 dose of HPV vaccine (adjusted)	114	295	0·46 (0·23, 0·92)	54·3% (7·7%, 77·4%)	0·029
Immunized ≤18 years					
≥1 dose of HPV vaccine (unadjusted)	132	392	0·27 (0·08, 0·90)	72·8% (9·5%, 91·8%)	0·034
≥1 dose of HPV vaccine (adjusted)	114	295	0·25 (0·07, 0·87)	75·2% (12·9%, 92·9%)	0·030
Immunized >18 years					
≥1 dose of HPV vaccine (unadjusted)	132	392	0·62 (0·35, 1·08)	38·3% (-8·0%, 64·8%)	0·09
≥1 dose of HPV vaccine (adjusted)	114	295	0·57 (0·26, 1·23)	43·2% (-22·7%, 73·7%)	0·15



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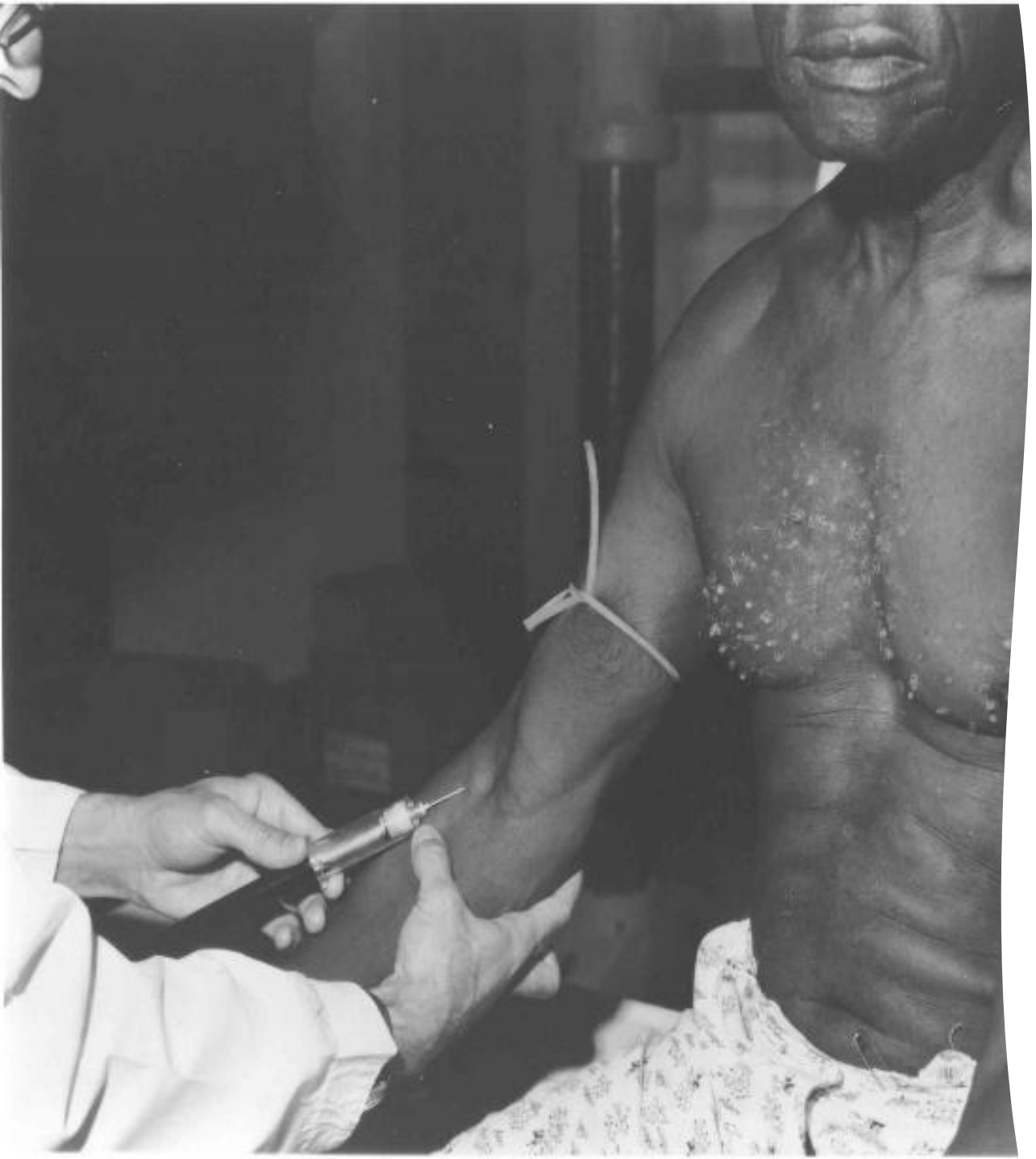


Syphilis

https://jmvh.org/article/syphilis-its-early-history-and-treatment-until-penicillin-and-the-debate-on-its-origins/

"A mysterious epidemic, hitherto unknown, which struck terror into all hearts by the rapidity of its spread, the ravages it made, and the apparent helplessness of the physicians to cure it."

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The Syphilis Epidemic

Between 1929 and 1931, the Public Health Services surveyed six rural areas in the South. The highest prevalence of syphilis was found in Macon County, Alabama. A more focused program in Macon County (36% of the population had syphilis) found that virtually none of the cases had been treated.

The Study of Untreated Syphilis in the Negro Male

1932 – 1972

The Story of a Voiceless Community



"The future of the Negro lies more in the research laboratory than in the schools"

~ Dr. Thomas Murrell

Macon County Health Department

ALABAMA STATE BOARD OF HEALTH AND U.S. PUBLICH HEALTH SERVICE COOPERATING WITH TUSKEGEE INSTITUTE

Dear Sir:

Some time ago you were given a thorough examination and since that time we hope you have gotten a great deal of treatment for bad blood. You will now be given your last chance to get a second examination. This examination is a very special one and after it is finished you will be given a special treatment if it is believed you are in a condition to stand it.

If you want this special examination and treatment you must meet the nurse at _____ on _____at _____ M. She will bring you to the Tuskegee Institute Hospital for this free treatment. We will be very busy when these examinations and treatments are being given, and will have lots of people to wait on. You will remember that you had to wait for some time when you had your last good examination, and we wish to let you know that because we expect to be so busy it may be necessary for you to remain in the hospital over one night. If this is necessary you will be furnished your meals and a bed, as well the examination and treatment without cost.

REMEMBER THIS IS YOUR LAST CHANCE FOR SPECIAL FREE TREATMENT. BE SURE TO MEET THE NURSE.

Macon County Health Department

This letter is reproduced from an educational website at the University of Illinois's Poynter Center for the Study of Ethics and American Institutions (http://poynter.indiana.edu/sas/lb/facts.html.)

TIMELINE OF EVENTS – "UNTREATED SYPHILIS IN THE NEGRO MALE"



- 1930 – Spends $50K for syphilis treatment demonstrations in six states (Alabama: Macon County)
- 1931 – Rosenwald funding is cut for treatment programs; physicians decide to follow the men diagnosed untreated
- 1932-33 – Follow up becomes a study of 399 syphilitic and 201 controls.
- 1945 – Penicillin accepted as the preferred treatment for syphilis
- 1947 – PHS establishes treatment centers, penicillin widely used in military operations
- 1968 – Concerns raised about the study
- 1969 – CDC reaffirms the need for the study
- 1972 – Study condemned in major news outlets; study ends

Gray, F.D. 1998. *The Tuskegee Syphilis Study*

The COVID-19 Effect on Vaccine Hesitancy

- Undermining of science/facts
- Government mistrust
- New vaccine
- Access

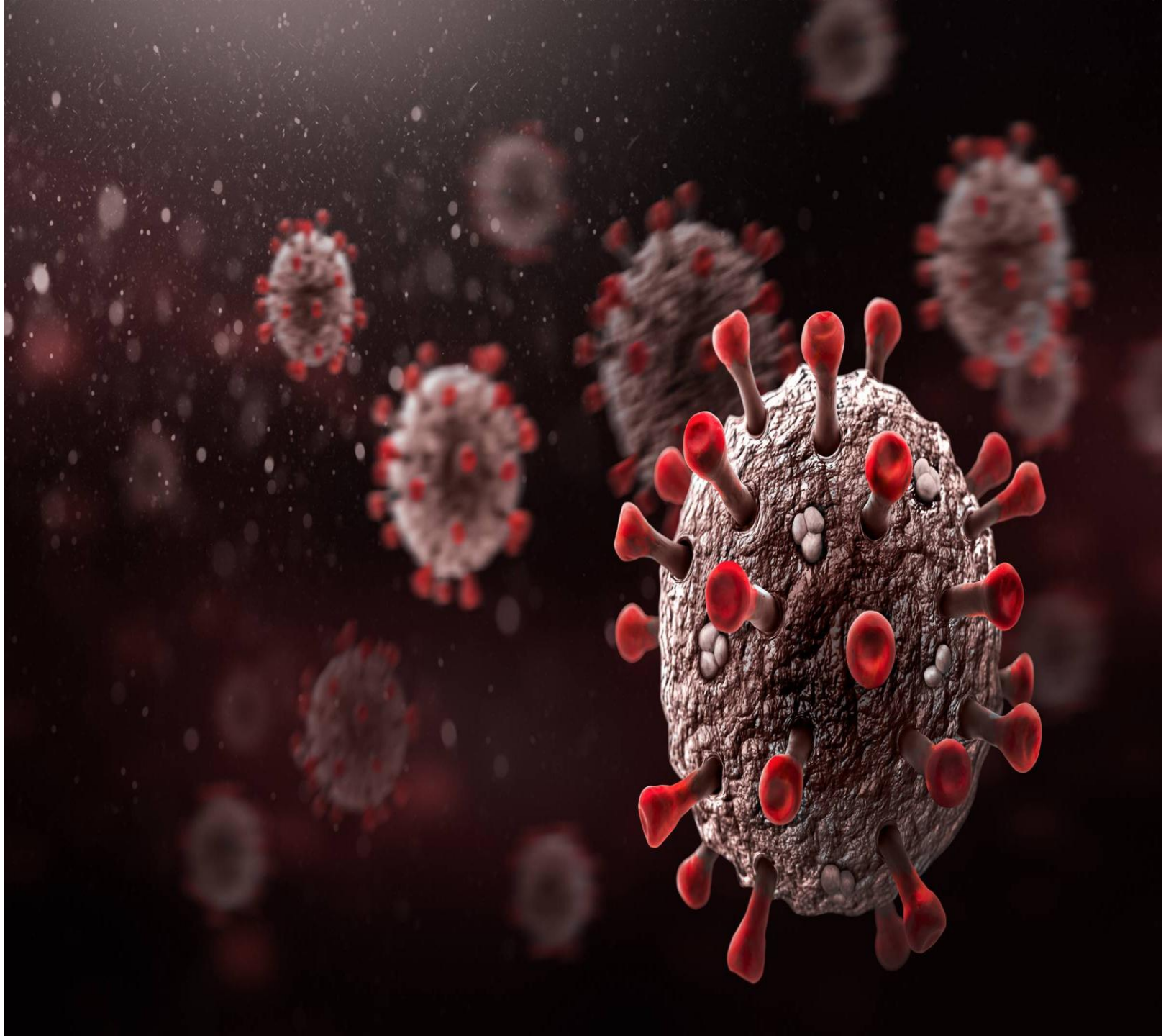
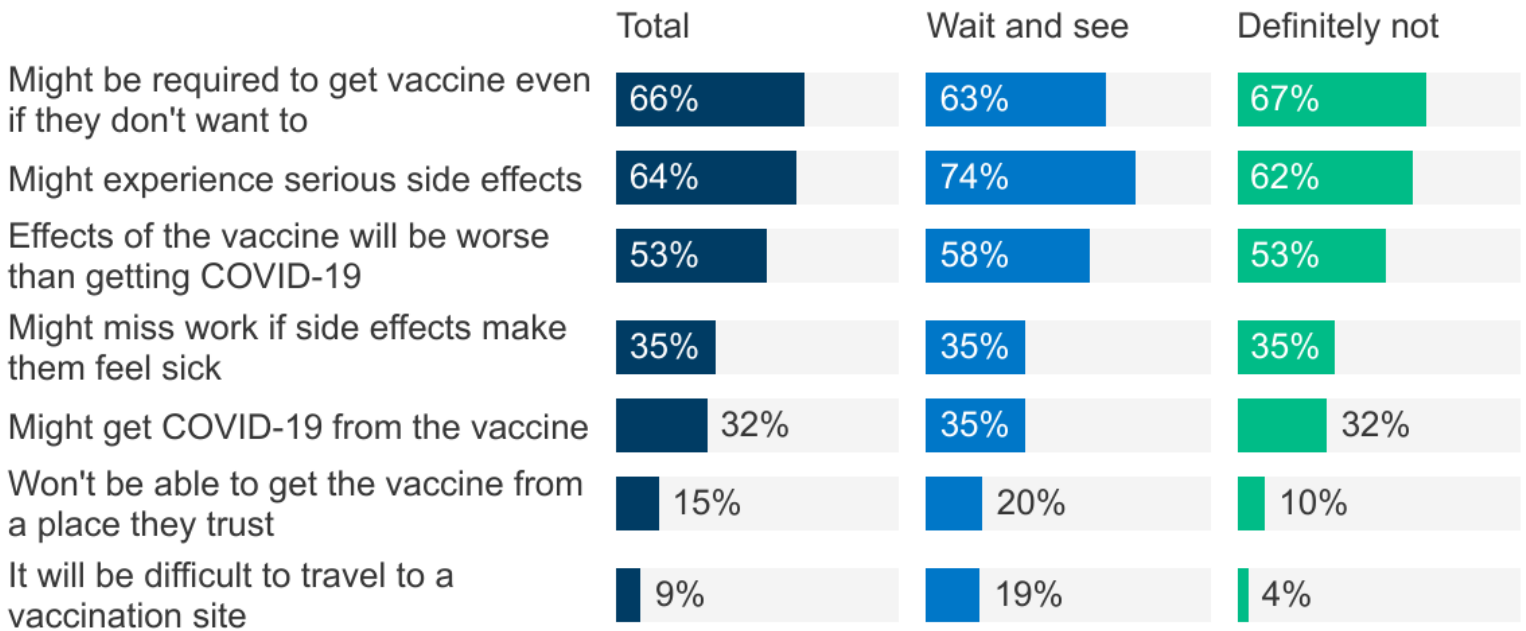


Figure 14

Concern About Being Required To Get Vaccinated When They Don't Want To And Possible Side Effects Are Top Concerns Among Hesitant Groups In Rural America

Percent of rural residents who say they are **very or somewhat concerned** about each of the following when it comes to the COVID-19 vaccine:



NOTE: Among adults living in rural areas who have not been vaccinated for COVID-19 and do not want to get the vaccine "As soon as possible." Sample size for those who say they will get the vaccine "Only if required" too small for analysis. See topline for full question wording.
SOURCE: KFF COVID-19 Vaccine Monitor: Rural America (March 15-29, 2021)

KFF COVID-19 Vaccine Monitor

Confidence in Authority: Rural America

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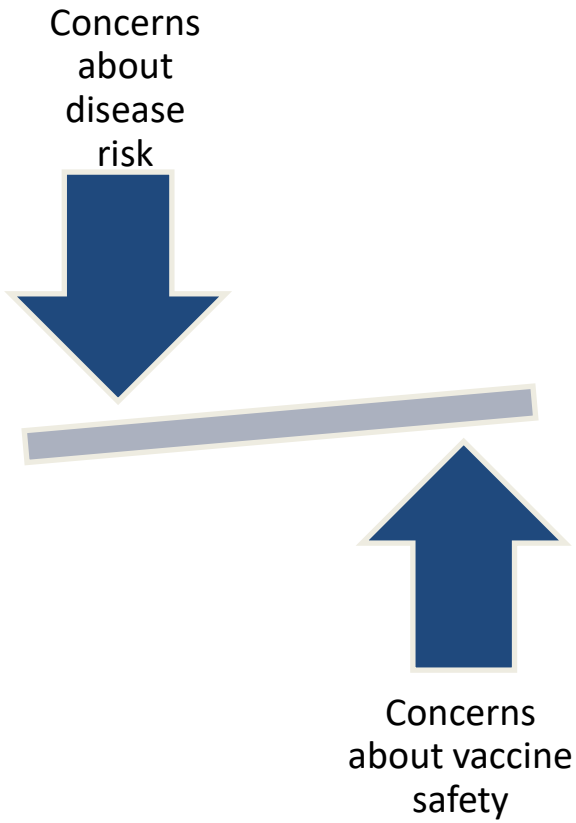
Complacency

https://www.who.int/

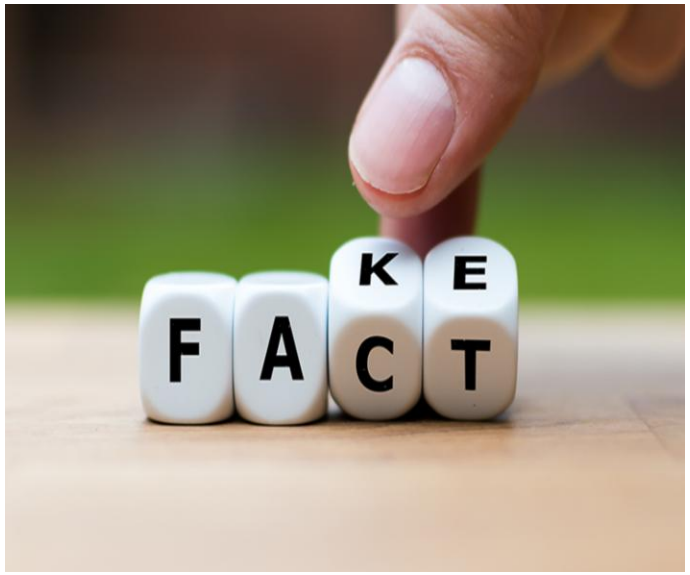
- Low perceived risk of getting the disease
- Not a serious as it sounds
- Not a priority

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Complacency: Consequence of Success



- **With success of vaccination, less disease in community.**
  - Leads to low perceived risk of disease and under appreciation of disease severity and transmission risks.
- **With social media propaganda rise, easier access to misinformation.**
  - Leads to persistent vaccine safety concerns.

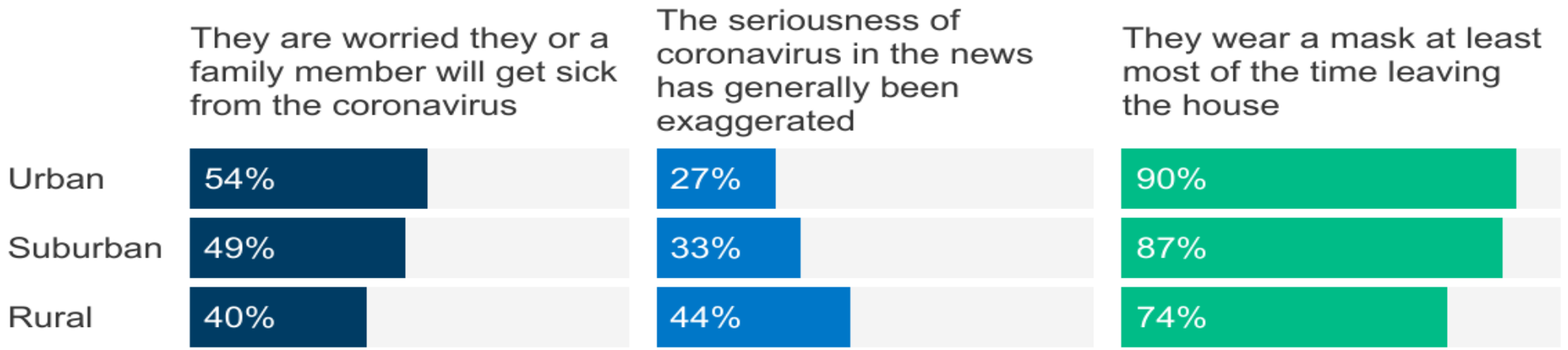


Complacency Regarding Disease Burden: Rural America

Figure 11

Smaller Shares Of Rural Residents Are Worried About Getting Sick From Coronavirus Or Report Wearing Masks, More Likely To Say Seriousness Has Been Exaggerated

Percent who say each of the following:



NOTE: See topline for full question wording.
SOURCE: KFF COVID-19 Vaccine Monitor: Rural America (March 15-29, 2021)

KFF COVID-19 Vaccine Monitor

Convenience

https://www.who.int/

Barriers related to:

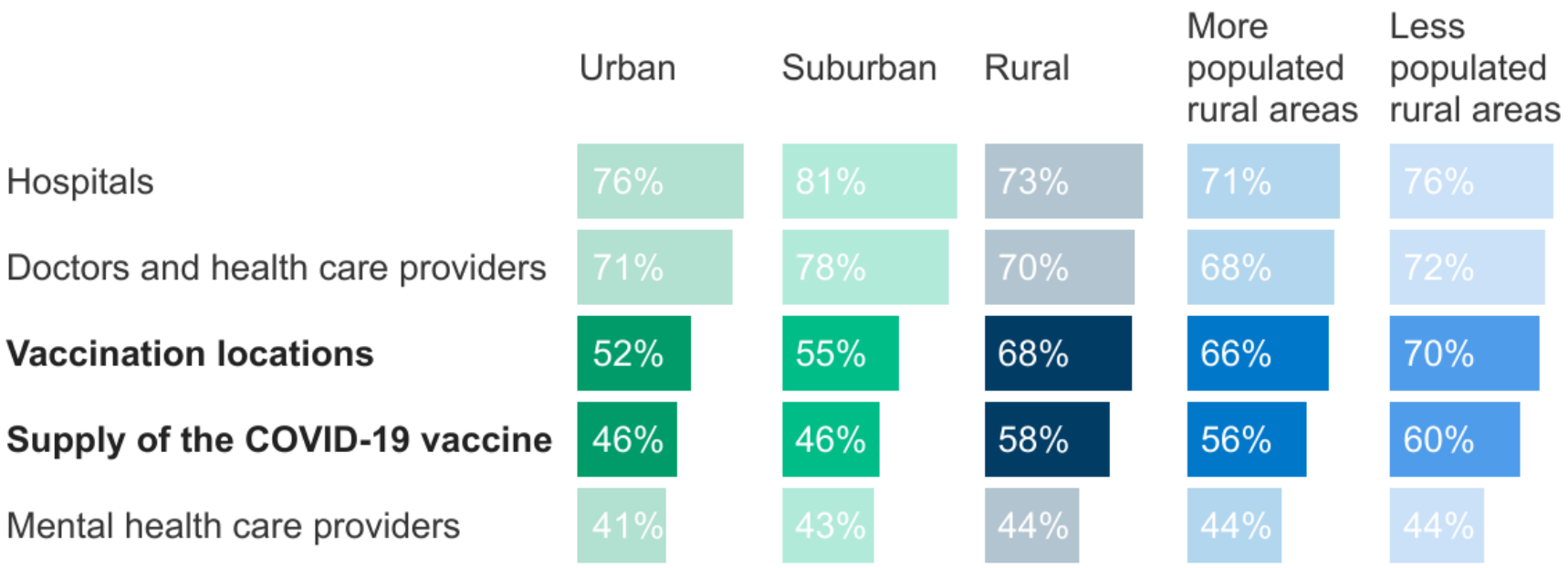
- Accessibility
- Availability
- Affordability



Figure 5

Majorities Of Rural Residents, Regardless Of Density, Say Their Community Has Enough COVID-19 Resources To Serve Local Residents; Fewer Urban And Suburban Resident Say The Same

Percent who say their community has enough of each of the following to serve local residents:



NOTE: See topline for full question wording.
SOURCE: KFF COVID-19 Vaccine Monitor: Rural America (March 15-29, 2021)

KFF COVID-19 Vaccine Monitor

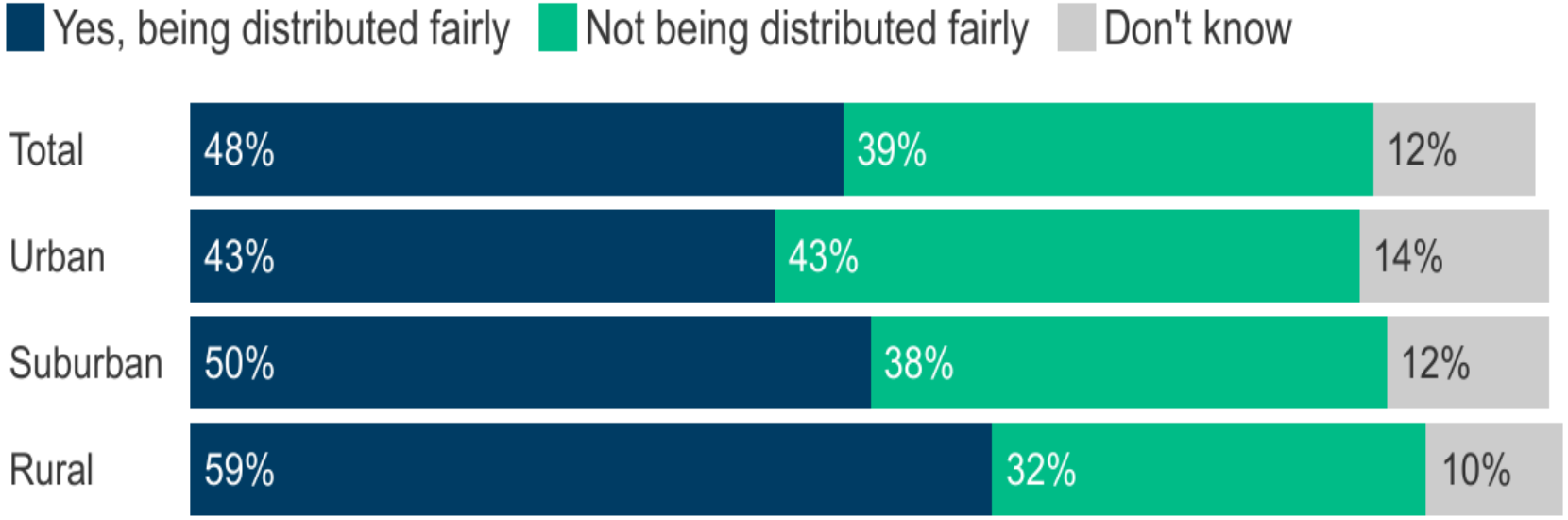
Convenience of Availability: Rural America

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Figure 7

Larger Shares Of Rural Residents Than Urban And Suburban Residents Say COVID-19 Vaccines Are Being Distributed Fairly Across Community Types

Do you think that the COVID-19 vaccines in the U.S. are being distributed fairly to people across urban, suburban, and rural areas, or not?



NOTE: See topline for full question wording.
SOURCE: KFF COVID-19 Vaccine Monitor: Rural America (March 15-29, 2021)

KFF COVID-19 Vaccine Monitor

Convenience of Accessibility: Rural America

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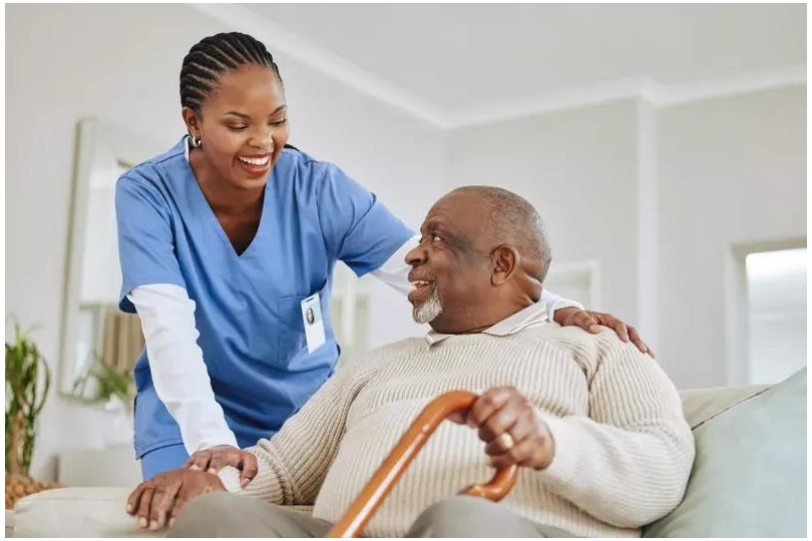
Addressing Vaccine Hesitancy

World Health Organization

- No single strategy can address all of the different dimensions of hesitancy
- What health workers (HW) say and how they interact with the patient/caregiver can strongly influence vaccine acceptance



Who might express vaccine hesitancy?



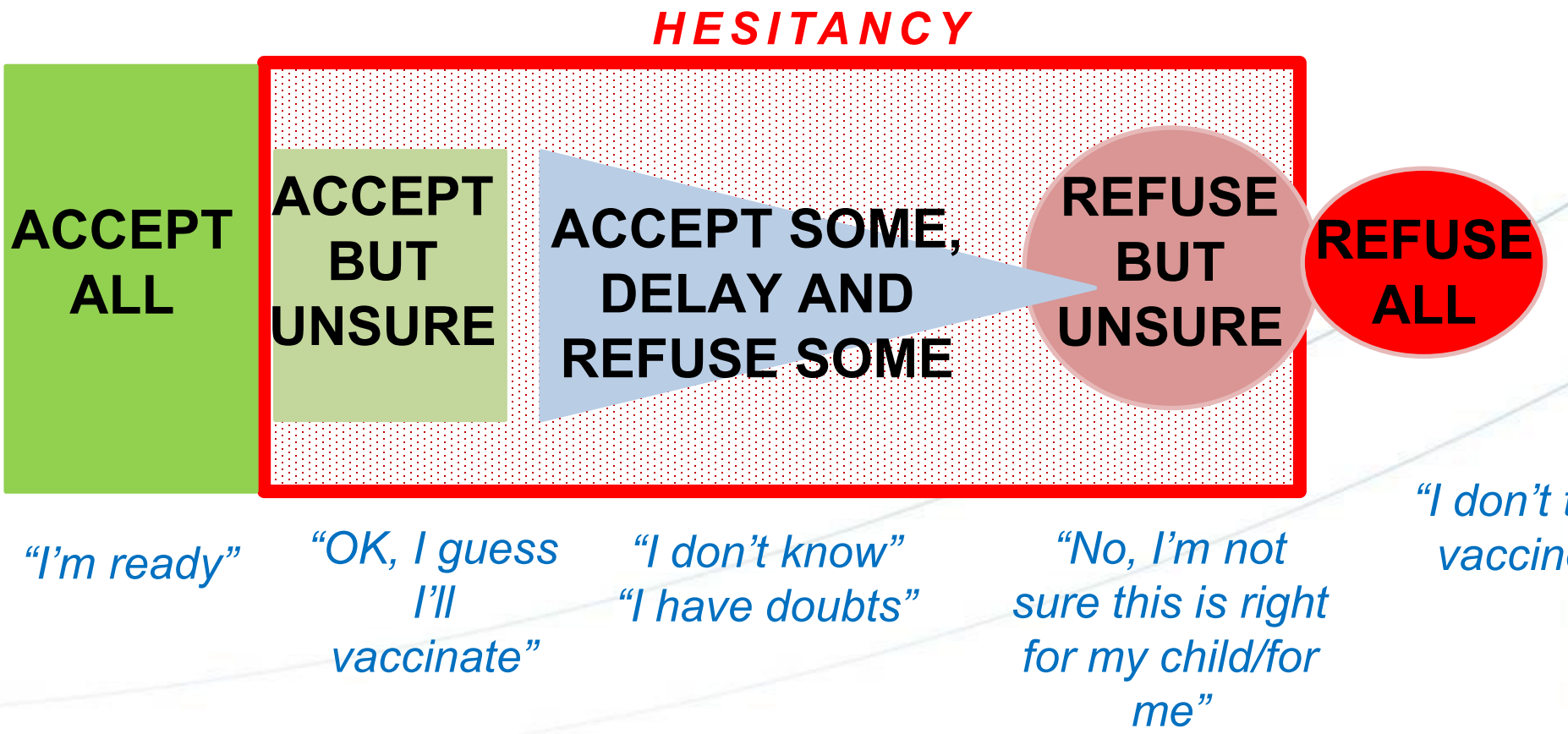








How to identify vaccine hesitancy



If hesitant, how to proceed?



Accept all	Vaccine hesitant	Refuse all
Offer positive encouragement: "That *is great!"* **Administer the vaccines**	**A conversation guided by the MOTIVATIONAL INTERVIEWING method**	• Do not **dismiss from the clinic** • **Not a debate -** focus on **their concerns** • **Leave space** for any discussion • Offer **to refer to other health professionals** who can discuss further (if available) • Explain **their responsibilities** if not accepting vaccination, e.g. not protected against diseases, may get ill, may need specialised health care…, and to watch for signs and symptoms of diseases in the community. *More points discussed later in the training.*

Principles for Enhancing Community Trust and Voice



- Information
- Independence
- Importance

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Steps to Mitigate Vaccine Hesitancy

1. Motivational Interviewing
2. Ask Open-Ended Questions
3. Reflect and Respond
   a) Affirm Strengths
   b) Validate Concerns
   c) Ask-Provide-Verify
4. Summarize the Interaction
5. Determine the Action



DO	DON'T
Do take a guiding style.	Do not take a traditional directive and argumentative style.
Do work with the parent/patient to establish trust.	Do not identify and solve the problem for the parent/patient.
Do explore doubts and interest in vaccination. Think from their perspective.	Do not argue or debate with the client. Make it known that you are there to listen to their concerns.
Do take time to reflect on what the caregiver/patient is saying.	Rush through without listening

Reminders

World Health Organization

Summary

Thoughtful discussions that encourage the caregiver/patient to examine and explore their reasons for hesitancy can help increase confidence and trust in vaccines, the healthcare delivery environment, and global public health efforts.

While the desired outcome of these discussions is to move someone towards a “yes” for acceptance, the principle of medical ethics, autonomy, beneficence, non-maleficence, and justice, still apply. It may take more than one visit to comprehensively discuss all concerns.



Introspection is the Key

I am:

- A Skilled Professional
- A Healer
- A Liberator
- A Change Agent
- A Champion for Right

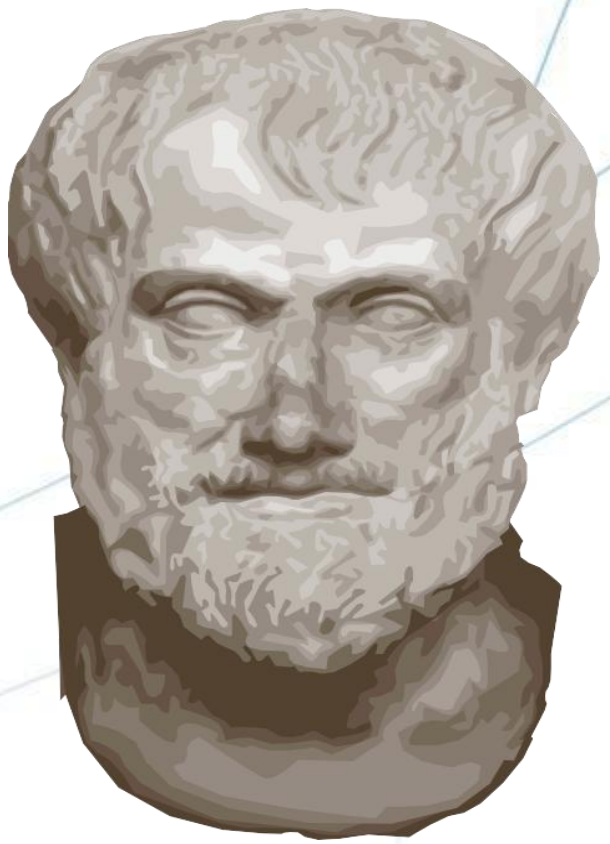
I have been Called to Excellence!



Excellence and Integrity

With regards to excellence, it is not enough to know it, but we must try to have and use it. We are what we repeatedly do. Therefore, excellence is not an act but a habit.

By philosophy, I do without being commanded what others do only from fear of the law. ~ Aristotle



Questions and Discussion



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