

Vaccines: Attitudes and Messaging

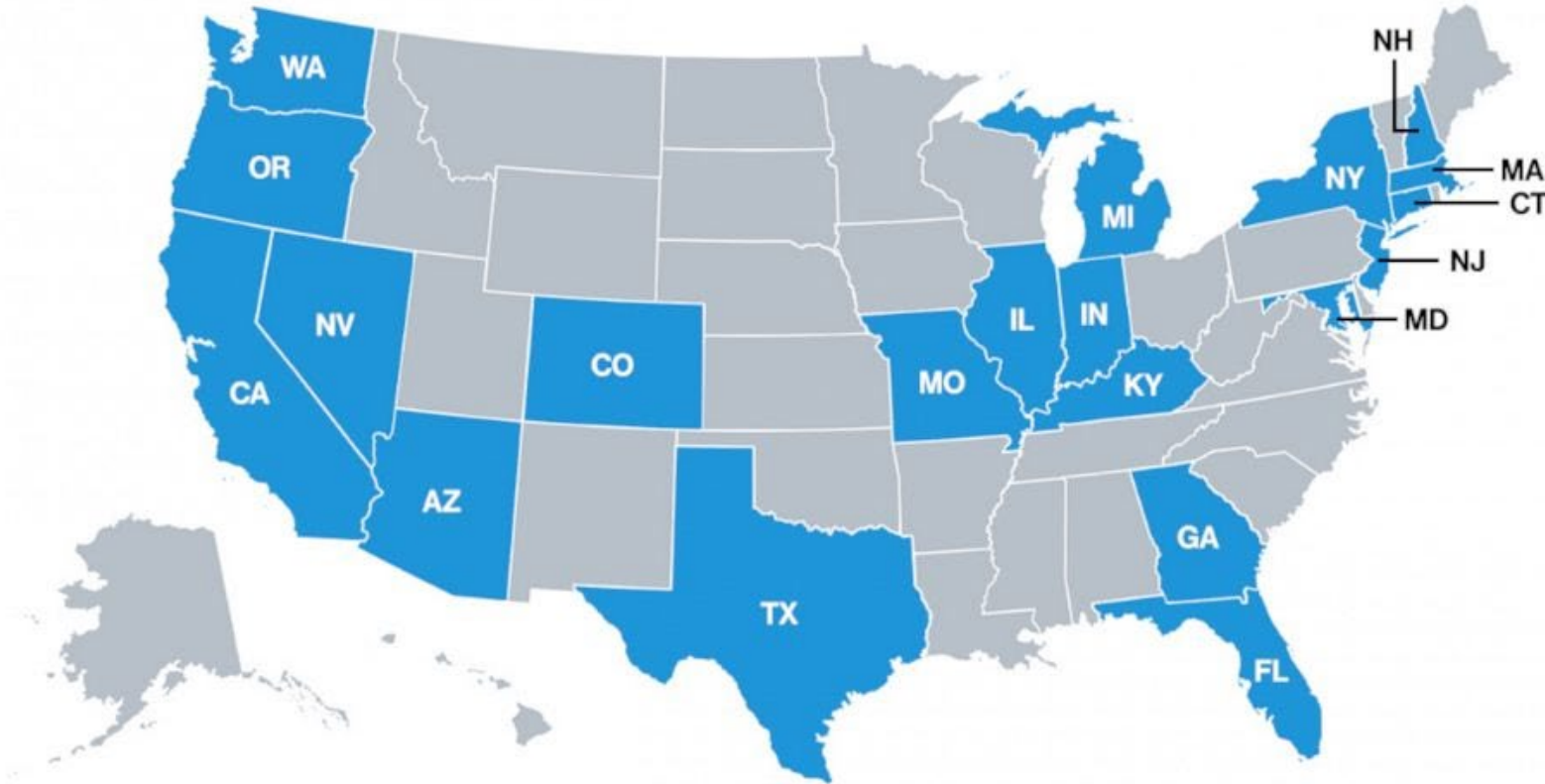
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Measles Declared Eliminated from the US in 2000 by the *World Health Organization*

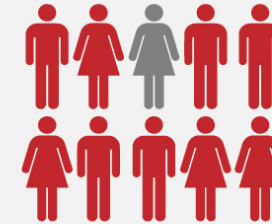
STATES WITH MEASLES CASES IN 2019



SOURCE: Centers for Disease Control, as of April 11, 2019



MEASLES BY THE NUMBERS

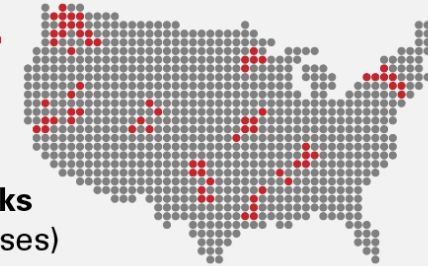


9 OUT OF 10

susceptible people with close contact to the measles virus will develop it

IN 2018, THE U.S. EXPERIENCED

- 349 confirmed measles cases
- 17 measles outbreaks (3 or more linked cases)



AMONG MEASLES PATIENTS:

- 1 in 4 will be hospitalized
- 1 in 1,000 will develop encephalitis
- 1 to 2 in 1,000 will die

95 PERCENT

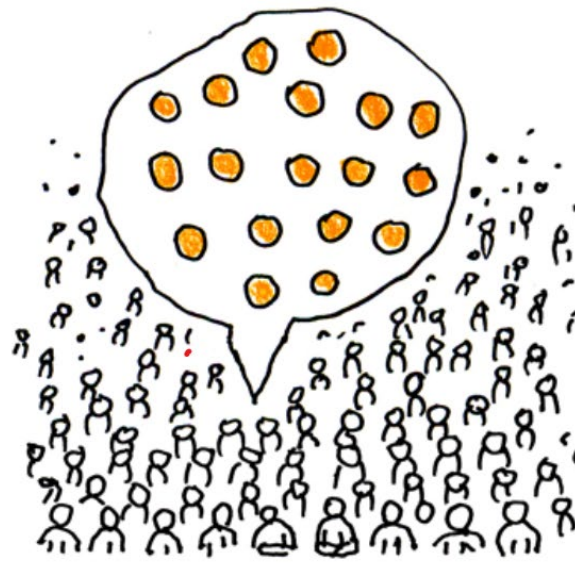
vaccination rate needed to achieve "herd immunity"



SOURCE: Centers for Disease Control and Prevention



scientists



the public

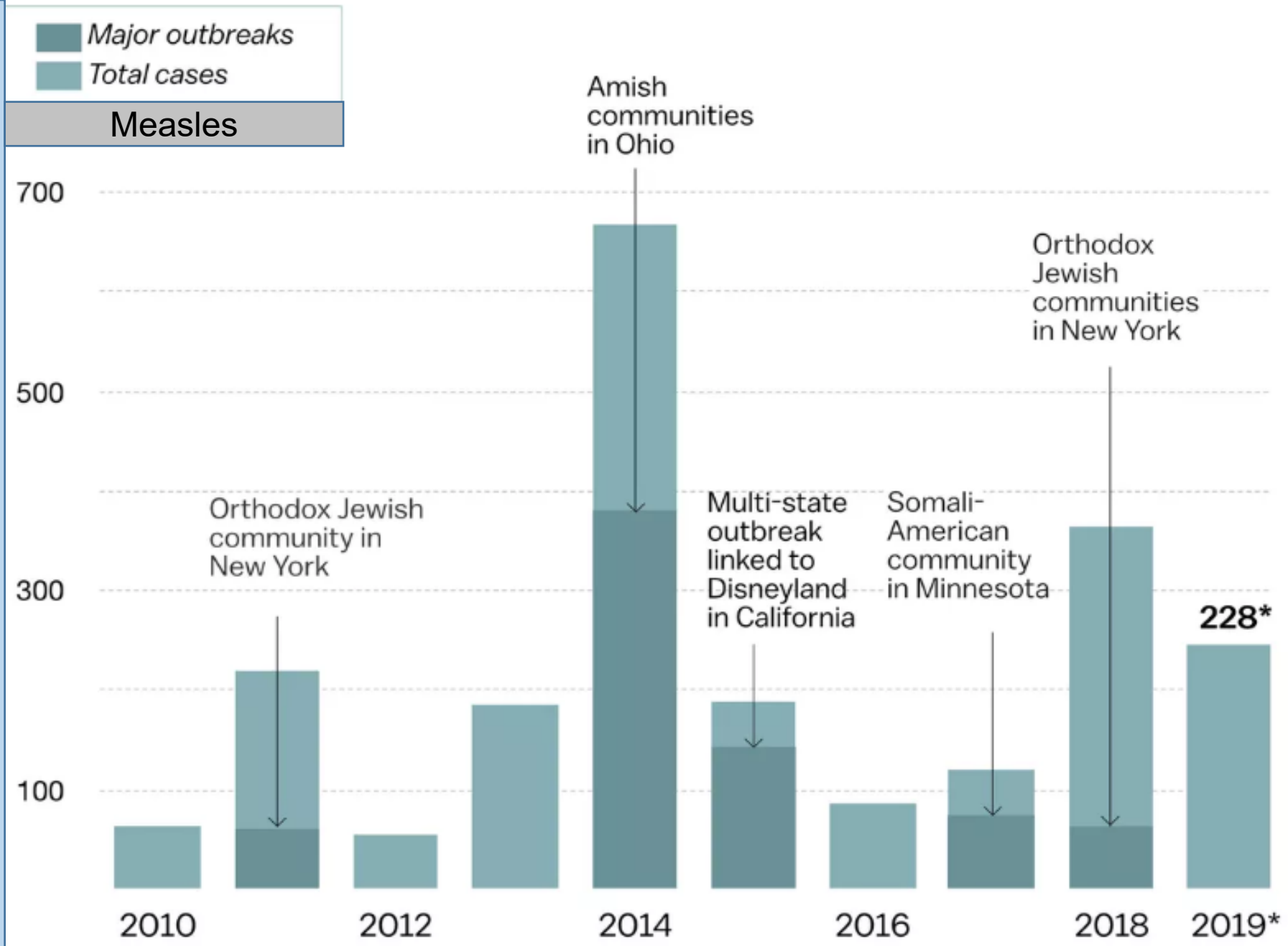
“Scientists often imagine that vaccine hesitancy is primarily the result of a knowledge gap: if the right knowledge is provided, the gap will be bridged, the logical conclusion will readily become apparent, and the rational decision-making process will kick in and override the emotional, illogical, misinformed position previously held. It has become increasingly clear that vaccine hesitancy cannot be fully addressed just by restating the facts.” (Rosin et al 2021)

Vaccines a scientific triumph



but

the current vaccine challenge is often a social identity issue, not narrowly technical/scientific



Motivated Reasoning

Attitudes Connected to Social Identity are Especially Sticky

- People's worldview/values can easily override unwelcome facts
- Rejecting a held belief generates inconsistencies that threaten
 - one's self-concept & in-group standing

Even rebels (especially rebels) conform to their sub-group's norms

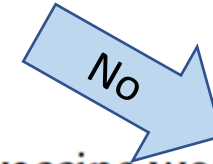


What happens when we try to correct vaccine misinformation?

Parents' beliefs in misinformation about vaccines are strengthened by pro-vaccine campaigns

[Sara Pluviano](#) , [Caroline Watt](#), [Giovanni Ragazzini](#) & [Sergio Della Sala](#)

Cognitive Processing, 20, 325–331 (2019) | [Cite this article](#)



Does correcting myths about the flu vaccine work? An experimental evaluation of the effects of corrective information

Brendan Nyhan ^{a,*}, Jason Reifler ^b *Vaccine* 33 (2015) 459–464

^a Dartmouth College, HB 6108, Hanover, NH 03755, United States

^b University of Exeter, United Kingdom

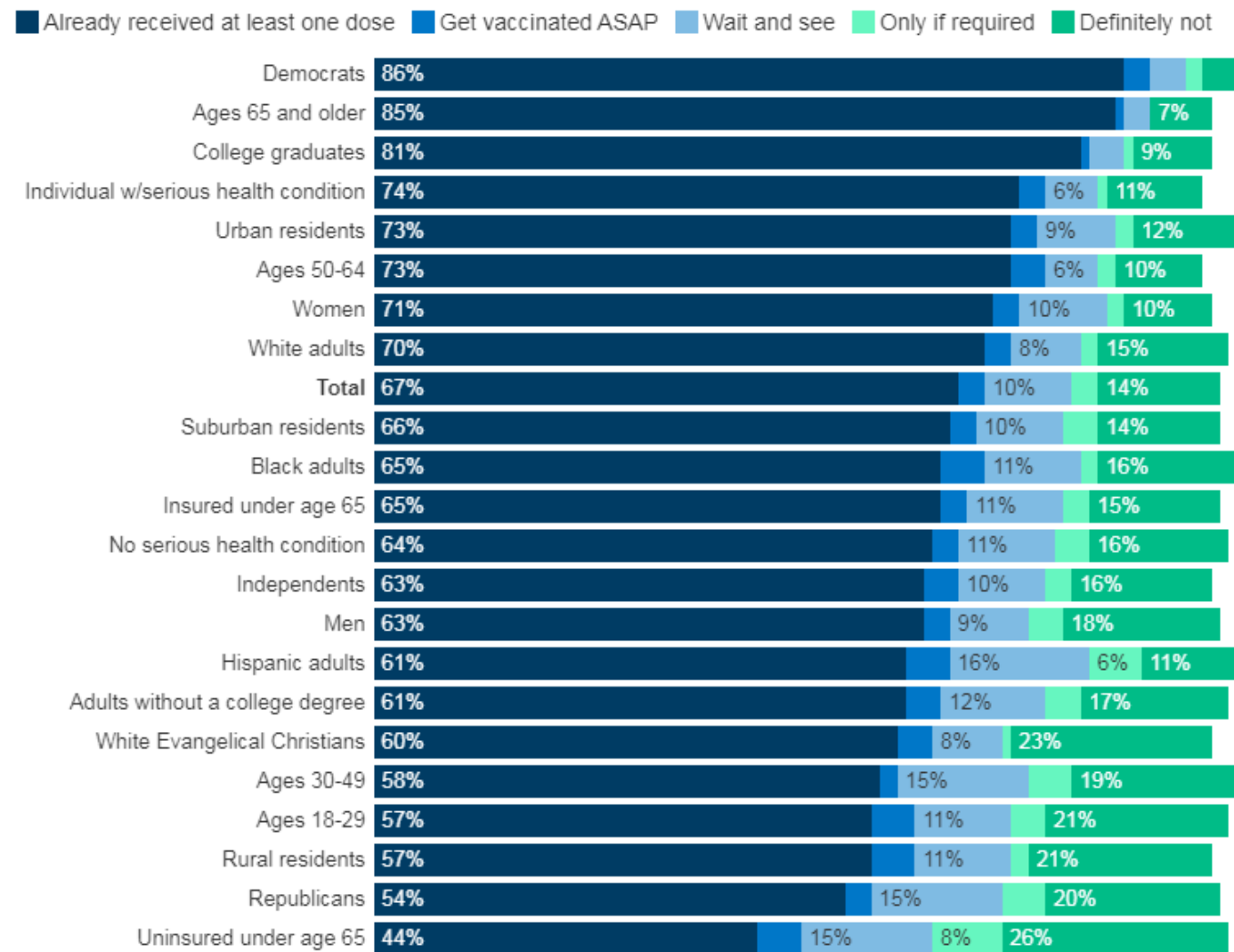
“Studies have failed to show the efficacy of educational interventions, and, indeed, a number of studies of educational interventions show a contrarian effect leaving the vaccine-hesitant more entrenched in their views.” (Jacobson 2020)

COVID Vaccination Attitudes Appear Socially/Identity Based

Figure 3

Republicans, Rural Residents, Younger Adults, And Uninsured Lag In Vaccine Uptake

Have you personally received at least one dose of the COVID-19 vaccine, or not? As you may know, an FDA-authorized vaccine for COVID-19 is now available for free to all adults in the U.S. Do you think you will...?



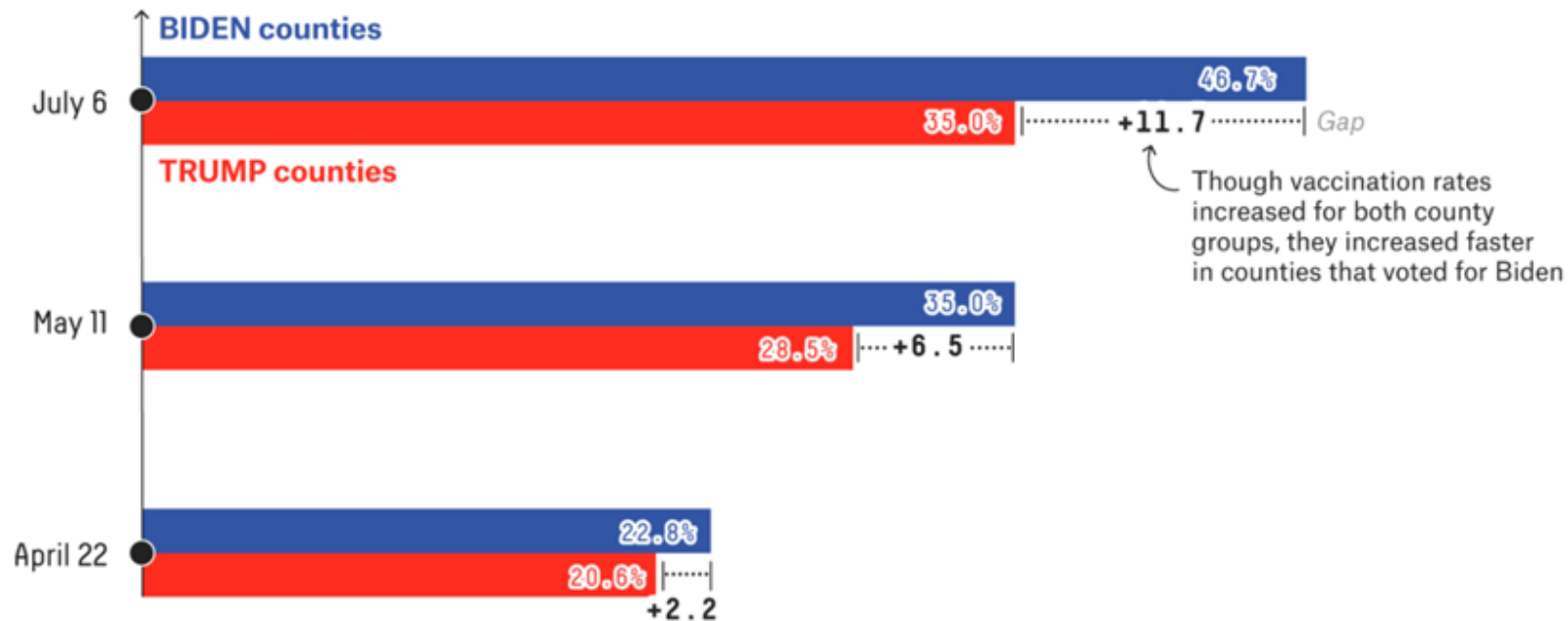
NOTE: See topline for full question wording.

SOURCE: KFF COVID-19 Vaccine Monitor (July 15-27, 2021) • [Download PNG](#)

COVID Vaccination Attitudes Appear Socially Based & Increasingly So

The gap in vaccination rates between Trump and Biden counties is growing

Share of fully vaccinated adults grouped by counties won by Biden and counties won by Trump in the 2020 presidential election, by month



Republicans who most trust far right news outlets have become more likely (46%) than they were in March (31%) to refuse vaccination (PRRI 2021)

Using a Socially Sensitive Lens Helps Explain Why...

 INDEPENDENT

People in Missouri are wearing disguises to get vaccinated, doctor says



Nathan Place

July 26, 2021 · 2 min read

 USA Today

Secret vaxxers: These Americans are getting COVID vaccinations but not telling anyone

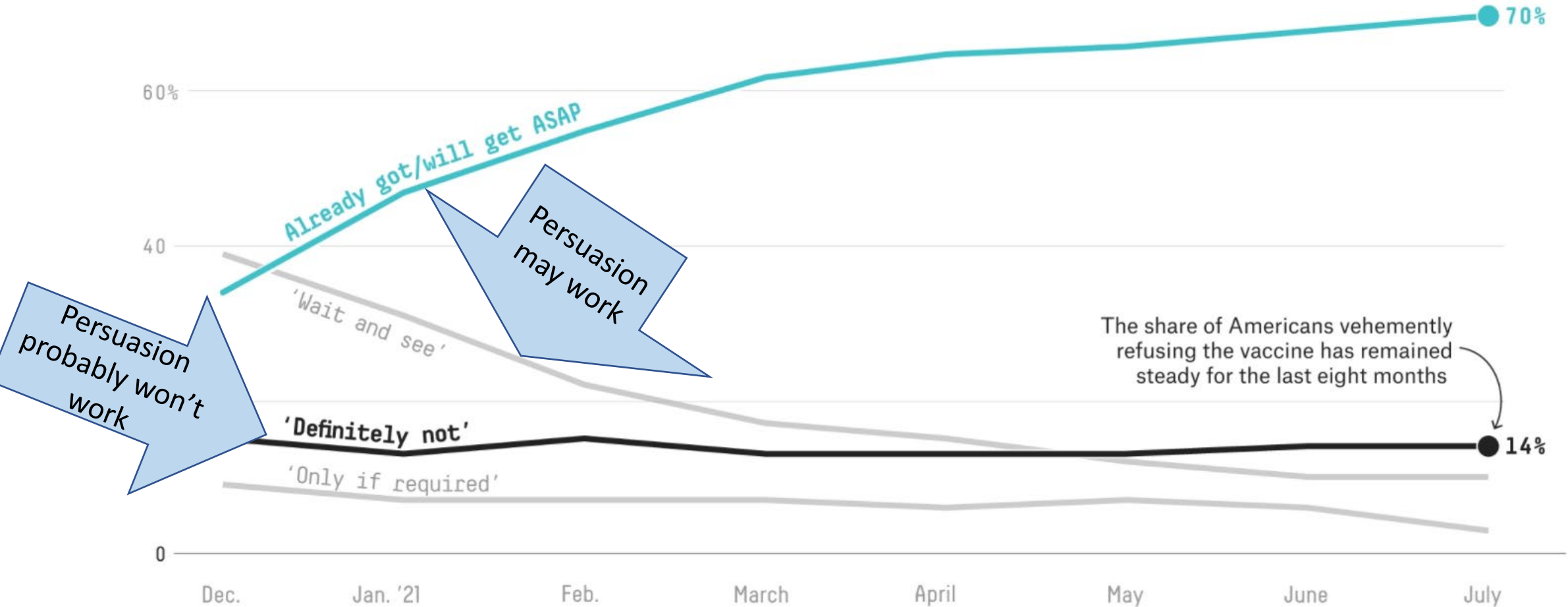
Secret vaxxers: These Americans are getting COVID vaccinations but ... many cases, vaccinated people hide it because they know people in ...

2 weeks ago

Promise and Limits of Messages

Americans who don't want the vaccine are not changing their minds

Share of respondents by whether they intend to get vaccinated against COVID-19, by month



Persuasion probably won't work

Persuasion may work

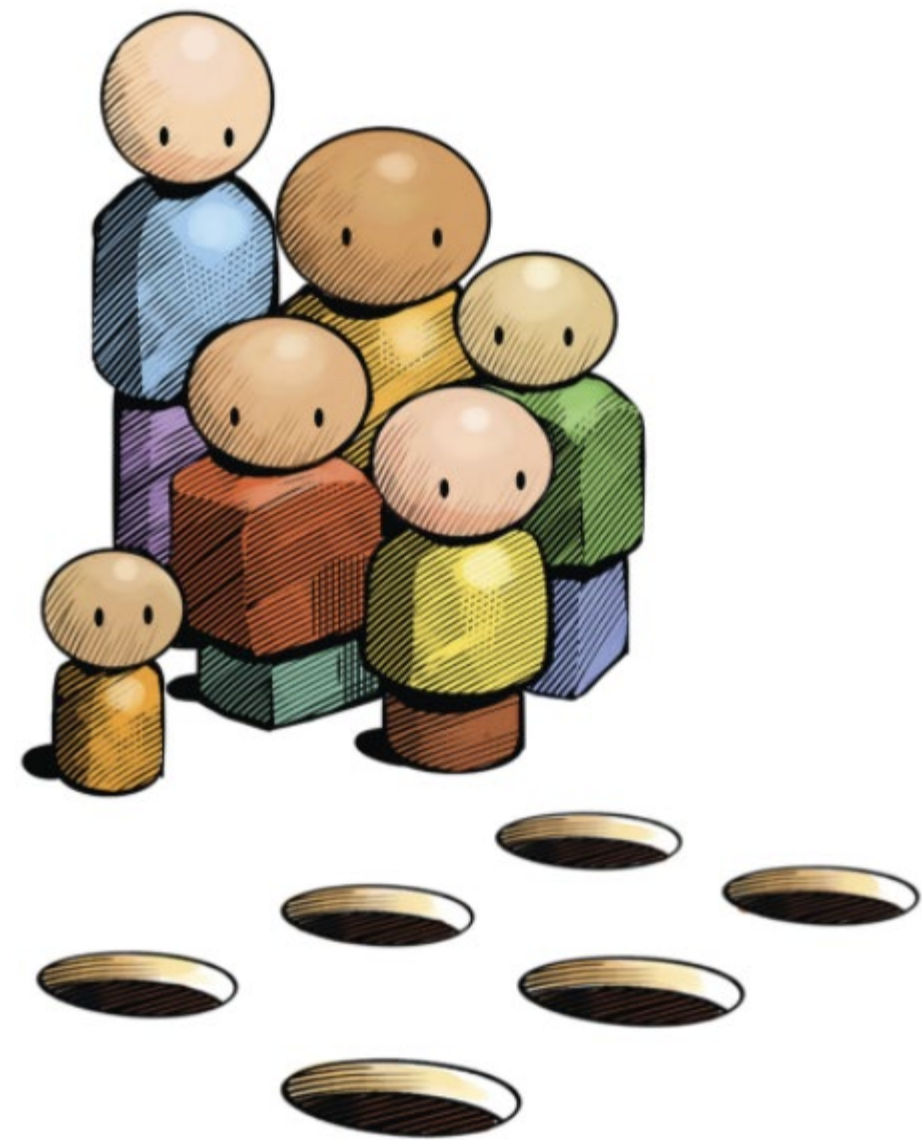
The share of Americans vehemently refusing the vaccine has remained steady for the last eight months

The latest poll was conducted July 15-27 and may not capture recent upticks in vaccinations after the CDC outlined the increased risk of the delta variant.

Subgroup Understanding

One size fits all communication part of the problem

Messaging should be sensitive to subpopulation cultures, experiences, and attitudes



Treatment 1 **Pneumonia Prevention**

The pneumococcal vaccine is highly effective at preventing pneumonia.



Plus a Control
Group

Treatment 2 **Costs**

In the United States, pneumonia is a leading cause of death, with over 50,000 people dying from pneumonia each year. Pneumonia also causes severe sickness leading to bed rest, hospitalization and missing work. Cigarette smokers, older adults, those with asthma or COPD are most susceptible to pneumonia. Fortunately, pneumonia can be prevented by the highly effective pneumococcal vaccine. Even if you are currently healthy, had pneumonia in the past, or had the flu shot you still need the pneumococcal vaccine to be protected. It is free, quick and easy to get the pneumococcal vaccine from most health providers.

Treatment 3 **Safety of Vaccine**

The pneumococcal vaccine is highly effective at preventing pneumonia and the pneumococcal vaccine has been thoroughly tested for safety by independent medical doctors and scientists. Years of evidence strongly show that sickness and side effects from the pneumococcal vaccine are incredibly rare. The pneumococcal vaccine is considered very safe.

Treatment 4 **Community and Family Duty**

It is everyone's duty to eliminate contagious disease from our communities. Those receiving the pneumococcal vaccine contribute to everyone's good health by helping to eradicate pneumonia. This simple act of getting the pneumococcal vaccine protects family, friends and our community because vaccinated individuals will be less likely to infect others with pneumonia. Being responsible and caring for those around you means getting vaccinated.

Treatment 5 **Combined message (all of the above)**

Survey Experiment Messages

If allowed by your healthcare professional, how important is it for you to have the pneumococcal vaccine?

Table 3. Survey Experiment Treatment Effect Sizes

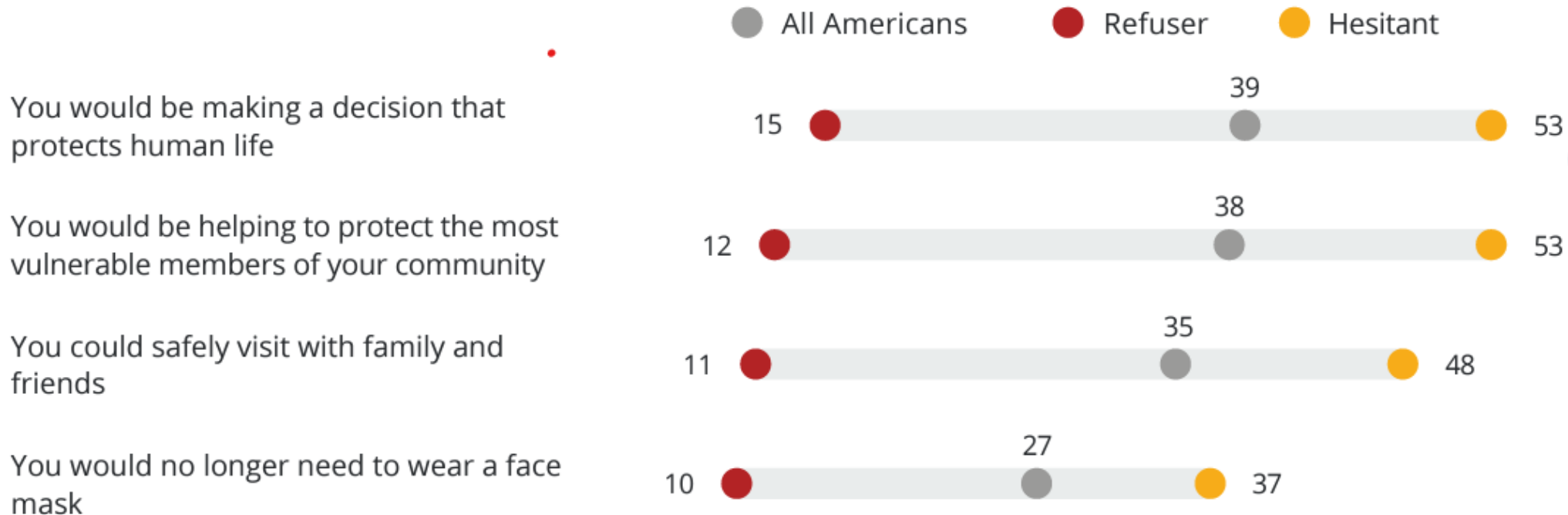
	Non-Whites	Non-Whites	Whites	Whites
	% Important	Treatment Effect	% Important	Treatment Effect
Control	74.4%	-	72.0%	-
Pneumonia Prevention	71.2%	-3.2%	71.7%	-0.3%
Costs	80.3%	5.9%	77.3%	5.3%
Safety of Vaccine	77.1%	2.7%	78.2%	6.2%
Community and Family Duty	86.6%	12.2%	80.8%	8.8%
Combined Message	84.3%	9.9%	78.3%	6.3%

Note: **Bold** indicates statistically significant effects in the ANOVA

With COVID, People Also Seem to be Motivated by Community Framed Messages (PRRI 2021)

FIGURE 6.1 Potential Benefits That Make Americans More Likely to Get a COVID-19 Vaccine

Percent who say the following makes them more likely to get vaccinated:



Elderly and Under 12 Children frame would likely work

Thank you!

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