

STORYTELLING VS DATA: FINDING A BALANCE THAT PERSUADES

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Department of Public Health
Montclair State University



COVID vaccine communication is, of course, the most obvious recent example, but it's an old story in which public health scientists and health educators have always struggled to find the most convincing balance. Consider some tools, ideas, and examples to explore the role of storytelling, in expressing your data.

Participants will be able to:

- Discuss ways in which storytelling has been used to debunk public health data
- Identify ways in which stories can be used to illustrate public health data and inform the policy process
- Incorporate stories that illustrate and elevate data for maximum policy impact



*IF YOU WOULD PERSUADE,
YOU MUST APPEAL TO INTEREST
RATHER THAN INTELLECT*



AS SCIENTISTS, WE FOCUS ON DATA
BUT THE DATA MAY BE A POOR MATCH FOR
THE STORIES THAT DRIVE PUBLIC
DISCUSSION, BELIEFS, AND ULTIMATELY THAT
DRIVE BOTH
INDIVIDUAL HEALTH DECISIONS AND
BROADER HEALTH POLICIES

USING DATA FOR POLICY DEVELOPMENT

Rule #1: You will depend upon data for nearly all aspects of policy development

Rule #2: Data by itself (especially in raw form) is seldom sufficient to sway anyone

Effective presentation of data, in a way that engages people emotionally and directly, leads them to a deeper understanding of how an issue is relevant to their lives, or in the case of policy-makers, to their constituents



DOES THIS MEAN....

The data don't matter???!!!!

OF COURSE NOT!

BUT HERE ARE SOME INSIGHTS INTO

HOW CHANGE HAPPENS

A fabulous book by: Leslie Crutchfield, 2018

AS WE THINK ABOUT THE FACTORS THAT LEAD TO SUCCESS, THE BOOK PROVIDES INSIGHTS INTO HOW WE CAN USE STORIES TO ENHANCE THOSE EFFORTS

- **Turn Grassroots Gold** (make investments in local organizations and causes that people are excited about, e.g. NRA)
- **Change hearts and then policies-** focus on how people think and feel about an issue (e.g. Joe Camel)
- **Break from business as usual** (companies recognizing domestic partnerships which shifted the norms about same sex marriage)
- **Doesn't have to be "public health perfect"!** (2 cents per ounce was what consumers would feel, but it wouldn't pass, so Berkeley passed a smaller one.)
- **Find compromise with "adversarial allies"** who perhaps share your story or know the people in your story
- **10+10+10+10+20 gets you there-** this is like "doesn't have to be public health perfect"- incremental change builds on itself
- **It's not up to fate-** be deliberate in the stories you tell and approaches you make

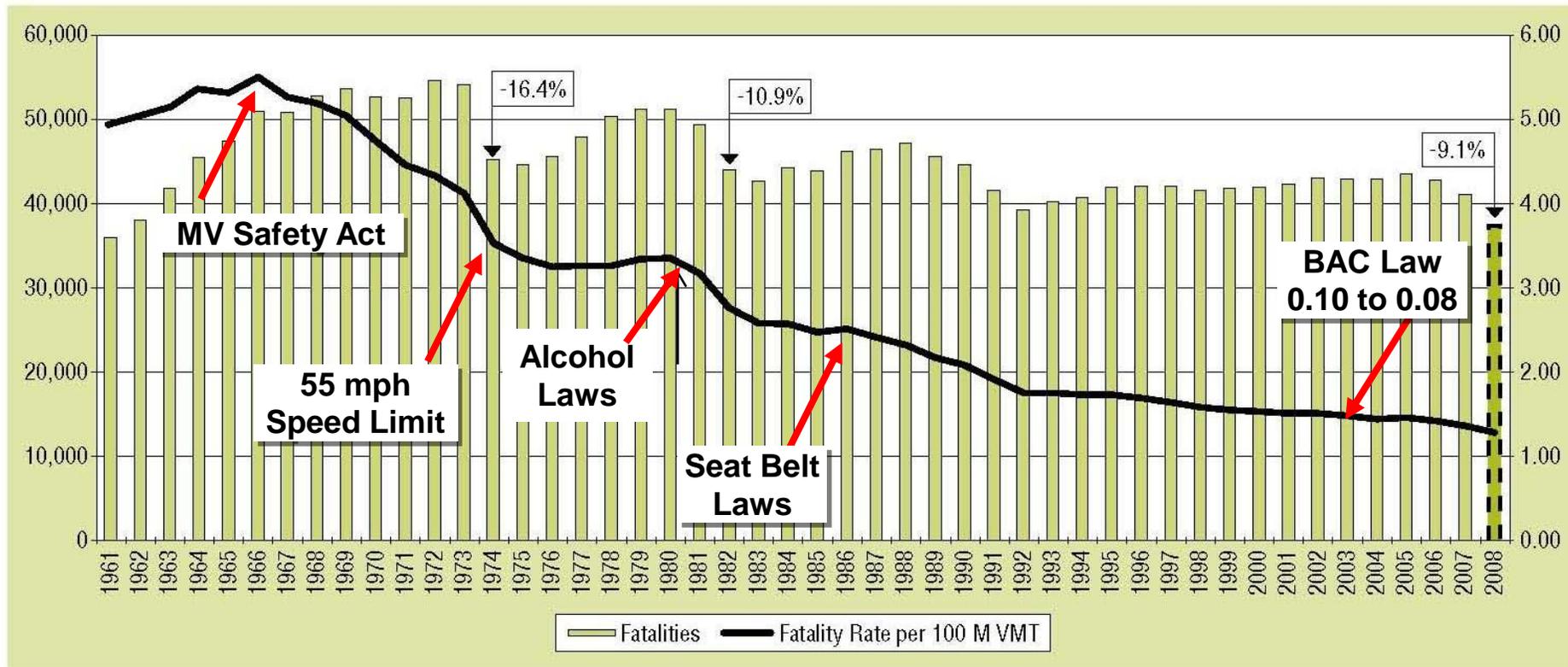
In short, stories matter at both the Individual AND the Policy level

- Health policy decisions are rarely made solely on the basis of their health impact.
- Health policies are often a compromise between competing philosophical/cultural views, economic considerations, AND potential health impact.
- There are often competing political and economic factors and STORIES that drive the discussion and thus...
- Advocating for policy is often not based on those data.

DATA MAKE YOU CREDIBLE...

But STORIES make you memorable!

CUMULATIVE EFFECTS FROM ALCOHOL LEGISLATION



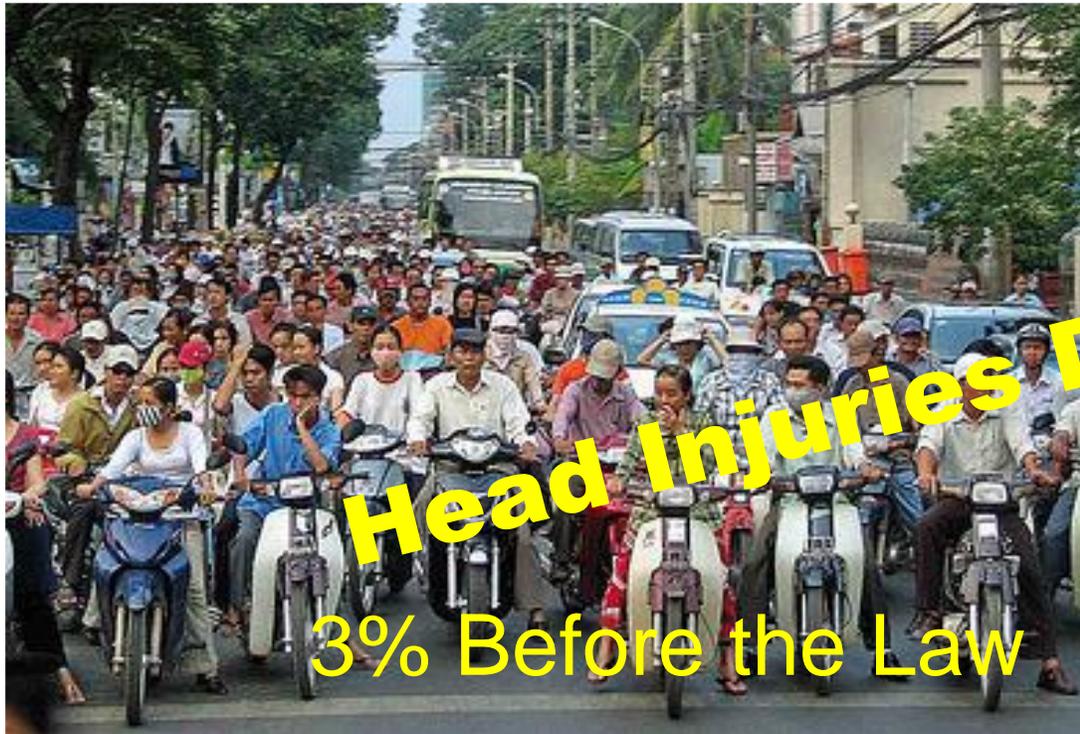
*1961-1974 - National Center for Health Statistics, HEW and State Accident Summaries (Adjusted to 30-Day Traffic Deaths by NHTSA), 1975-2007 NHTSA Fatality Analysis Reporting System (FARS), 2008 Statistical Projections

Laws and Motor Vehicle Fatalities, US 1961-2008

HELMET LEGISLATION IN VIETNAM

December, 2007

January, 2008



Ederer, D, Parker, E, Sleet, DA. Motorcycle Helmets as a Vaccine. Division Global Health Protection, CDC, April, 2014

COLLOQUIAL EVIDENCE

- From a scientists' perspective, evidence has a very specific data-driven meaning. From an educator's or policy maker's perspective, any information that informs choices can be considered evidence.
- Colloquial evidence often includes vignettes or anecdotes from individuals or families with a health condition, expert testimony, etc.
- Decisions are sometimes shaped more by such colloquial evidence than by quantitative evidence of harms and benefits arising from traditional scientific investigations
- Issues that relate to specific stakeholders often have the most influence

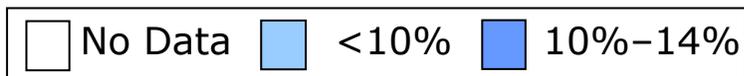
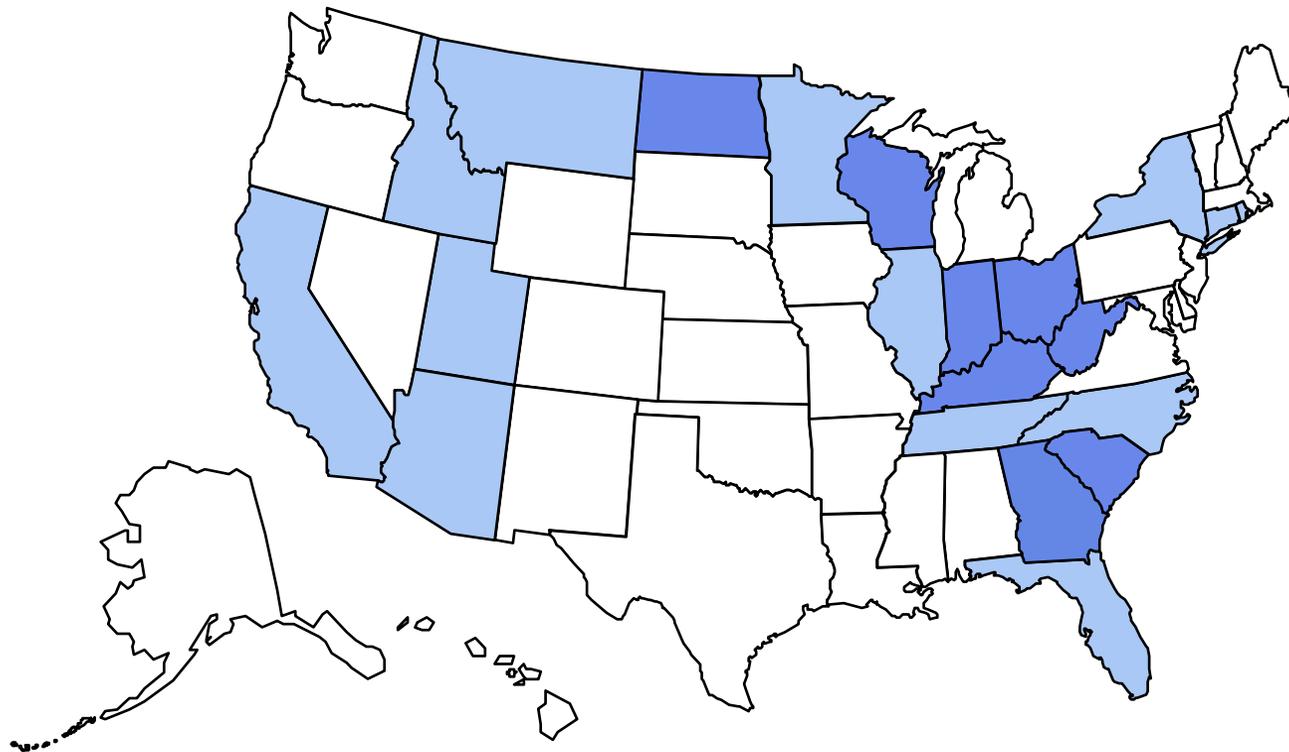
LET'S TAKE THE CASE OF OBESITY

THE MOST COMMON NARRATIVE IS THAT PEOPLE DON'T EAT RIGHT, THAT CERTAIN GROUPS OF PEOPLE MAKE POORER CHOICES THAN OTHERS, AND THAT ADDRESSING OBESITY IS AS SIMPLE AS "EATING RIGHT"

OBESITY TRENDS* AMONG U.S. ADULTS

BRFSS, 1985

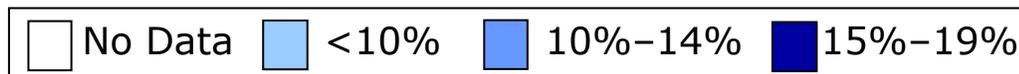
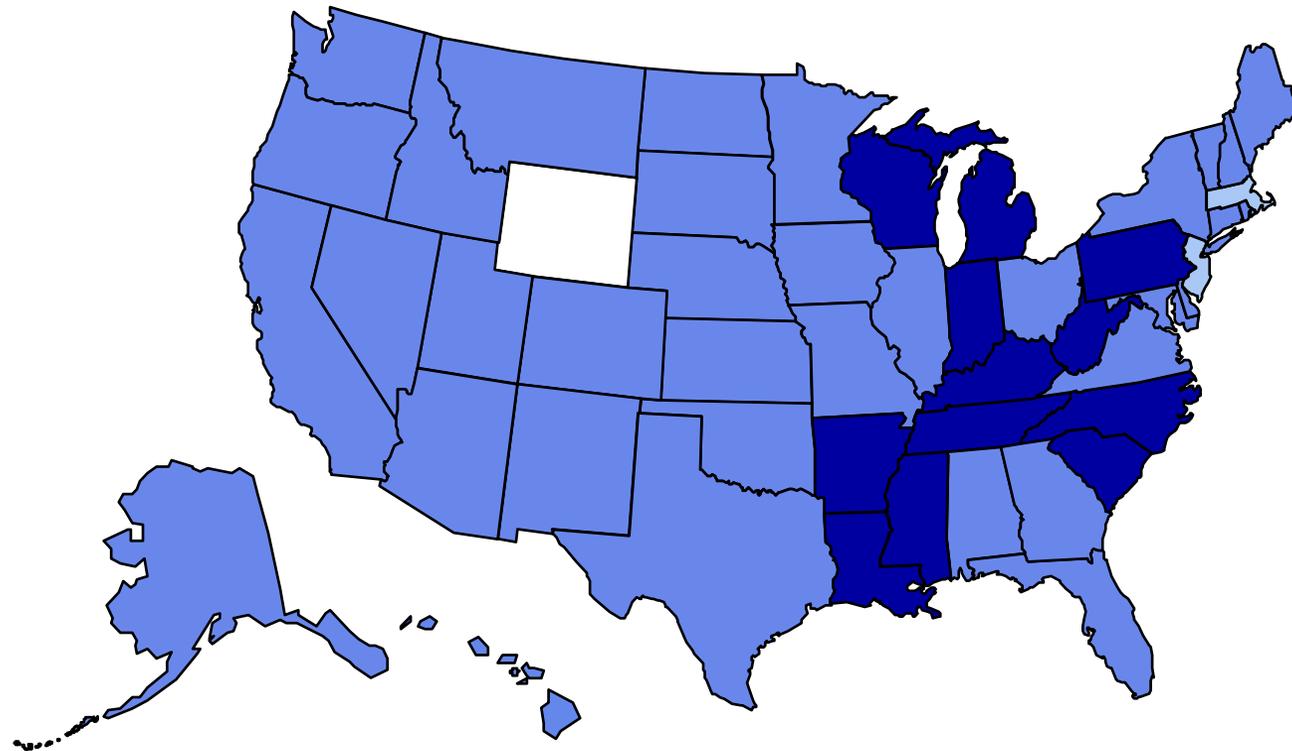
(*BMI ≥ 30 , or ~ 30 lbs overweight for 5' 4" woman)



OBESITY TRENDS* AMONG U.S. ADULTS

BRFSS, 1993

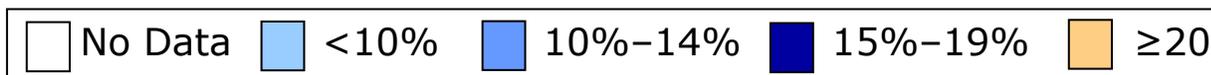
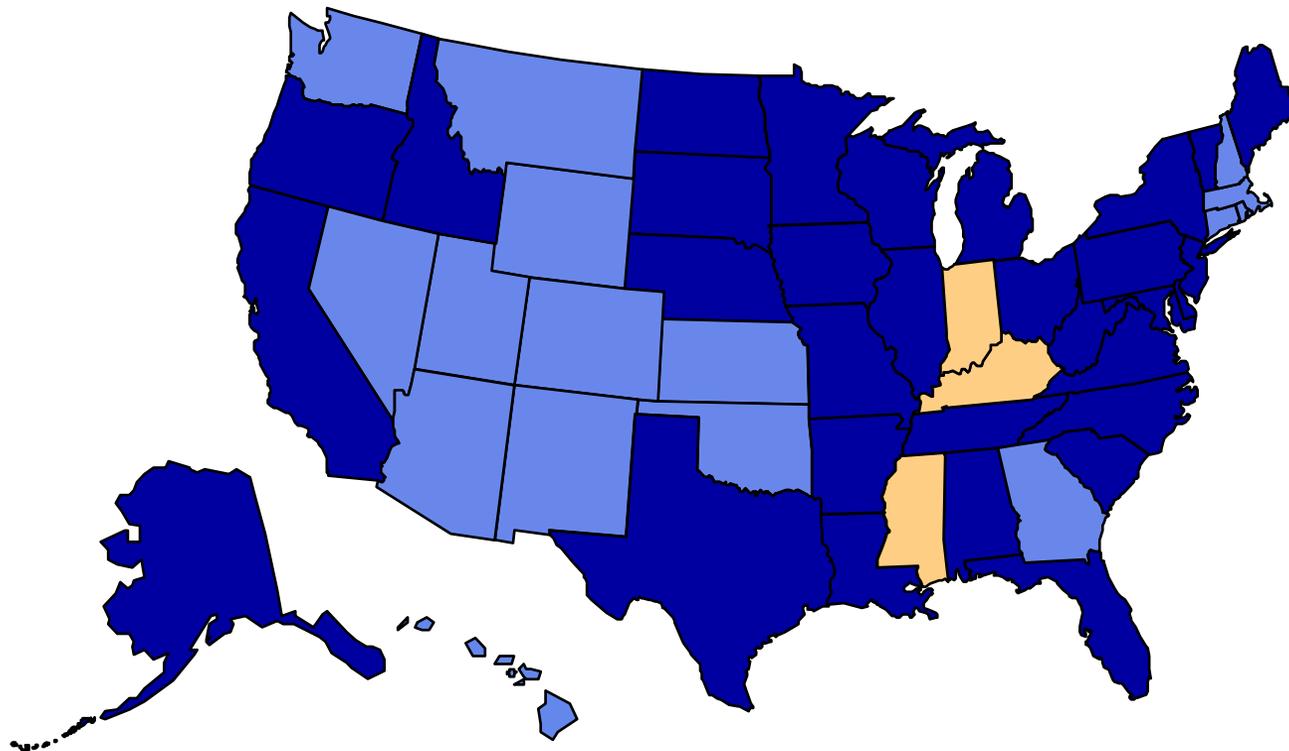
(*BMI ≥ 30 , or ~ 30 lbs overweight for 5' 4" woman)



OBESITY TRENDS* AMONG U.S. ADULTS

BRFSS, 1997

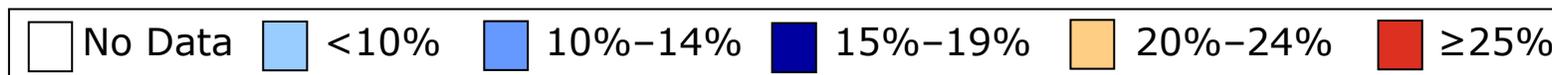
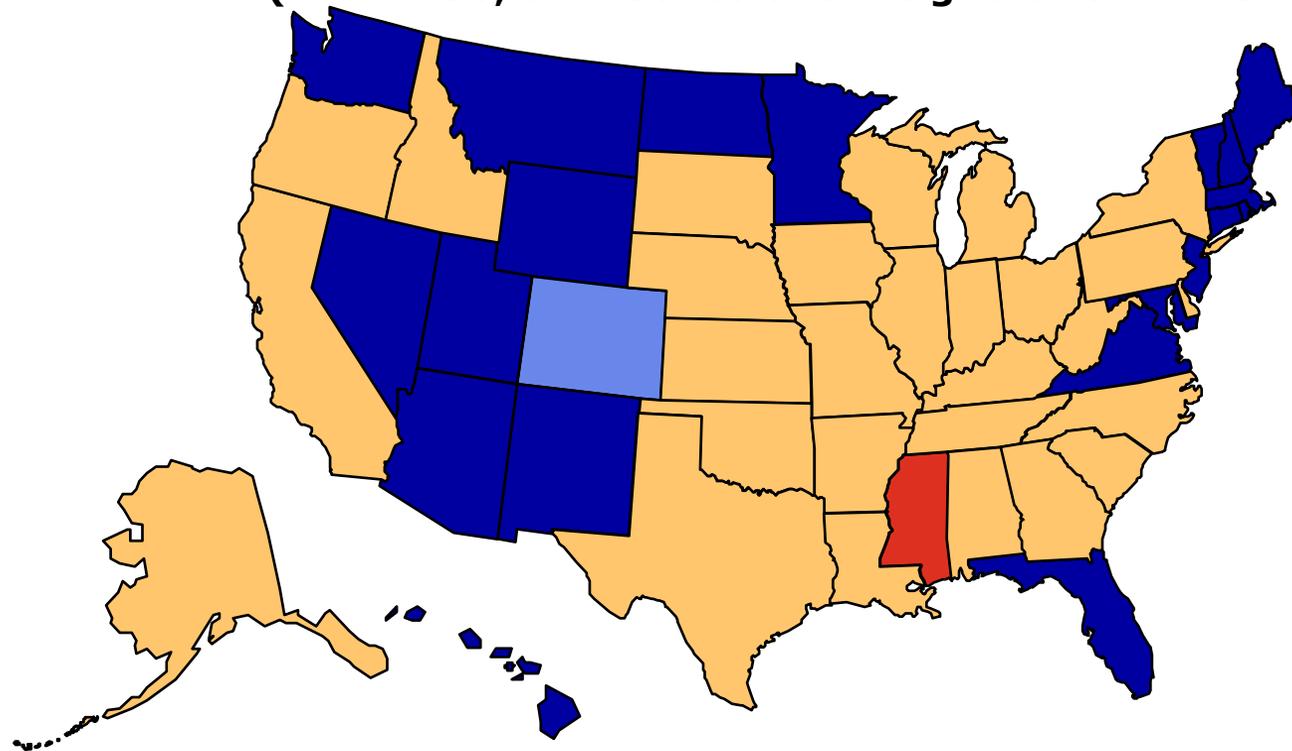
(*BMI ≥ 30 , or ~ 30 lbs overweight for 5' 4" woman)



OBESITY TRENDS* AMONG U.S. ADULTS

BRFSS, 2001

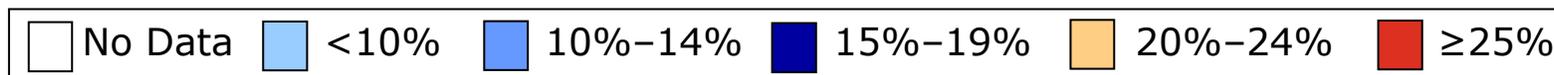
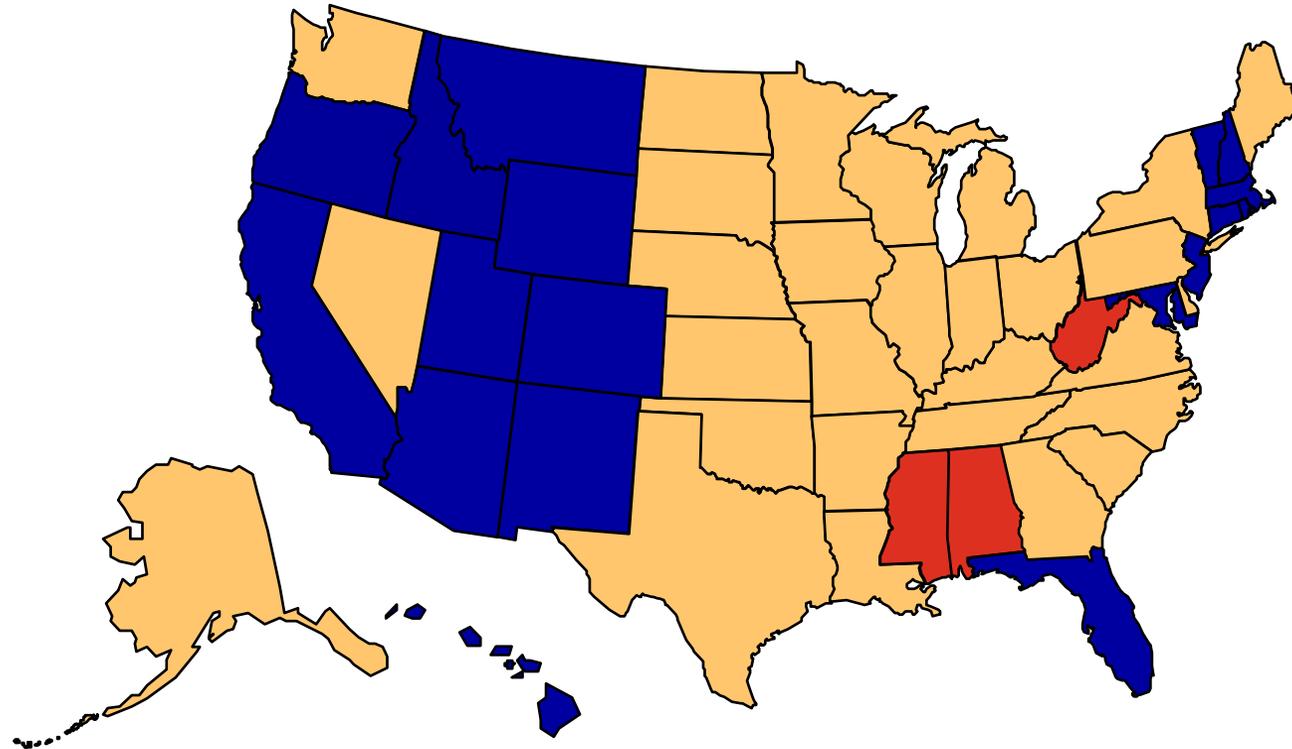
(*BMI ≥ 30 , or ~ 30 lbs overweight for 5' 4" woman)



Obesity Trends* Among U.S. Adults

BRFSS, 2002

(*BMI ≥ 30 , or ~ 30 lbs overweight for 5' 4" woman)

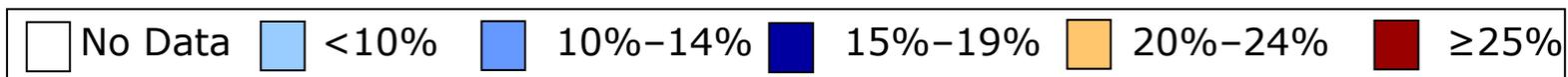
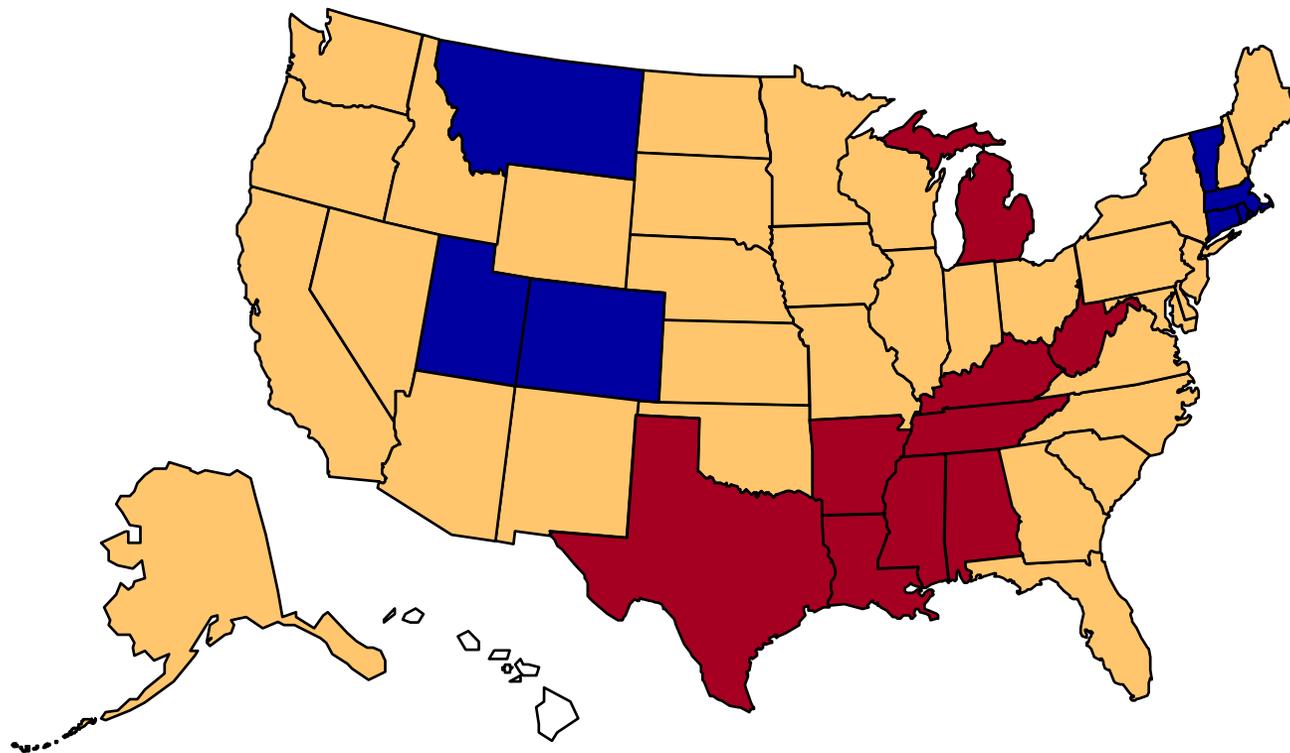


Source: Behavioral Risk Factor Surveillance System, CDC

OBESITY TRENDS* AMONG U.S. ADULTS

BRFSS, 2004

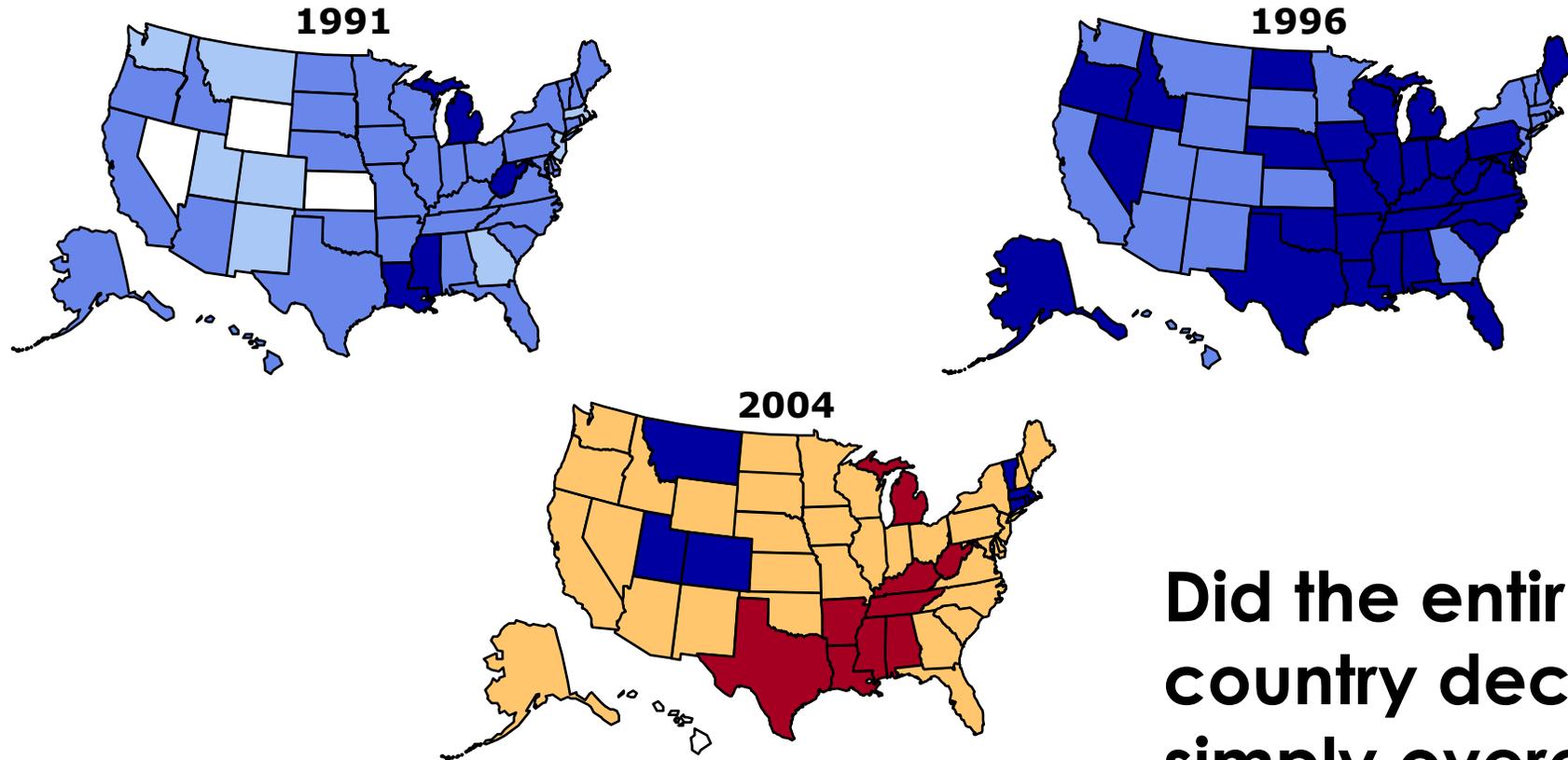
(*BMI ≥ 30 , or ~ 30 lbs overweight for 5' 4" person)



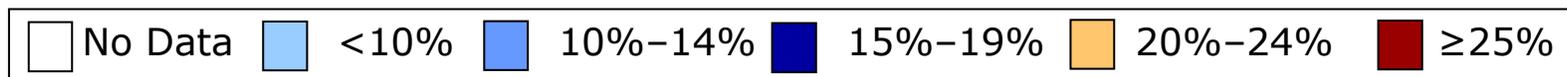
Obesity Trends* Among U.S. Adults

BRFSS, 1991, 1996, 2004

(*BMI ≥ 30 , or about 30 lbs overweight for 5'4" person)



**Did the entire
country decide to
simply overeat?!**



Rate of Firearm Homicide Deaths, 1981-2010

Per 100,000 people



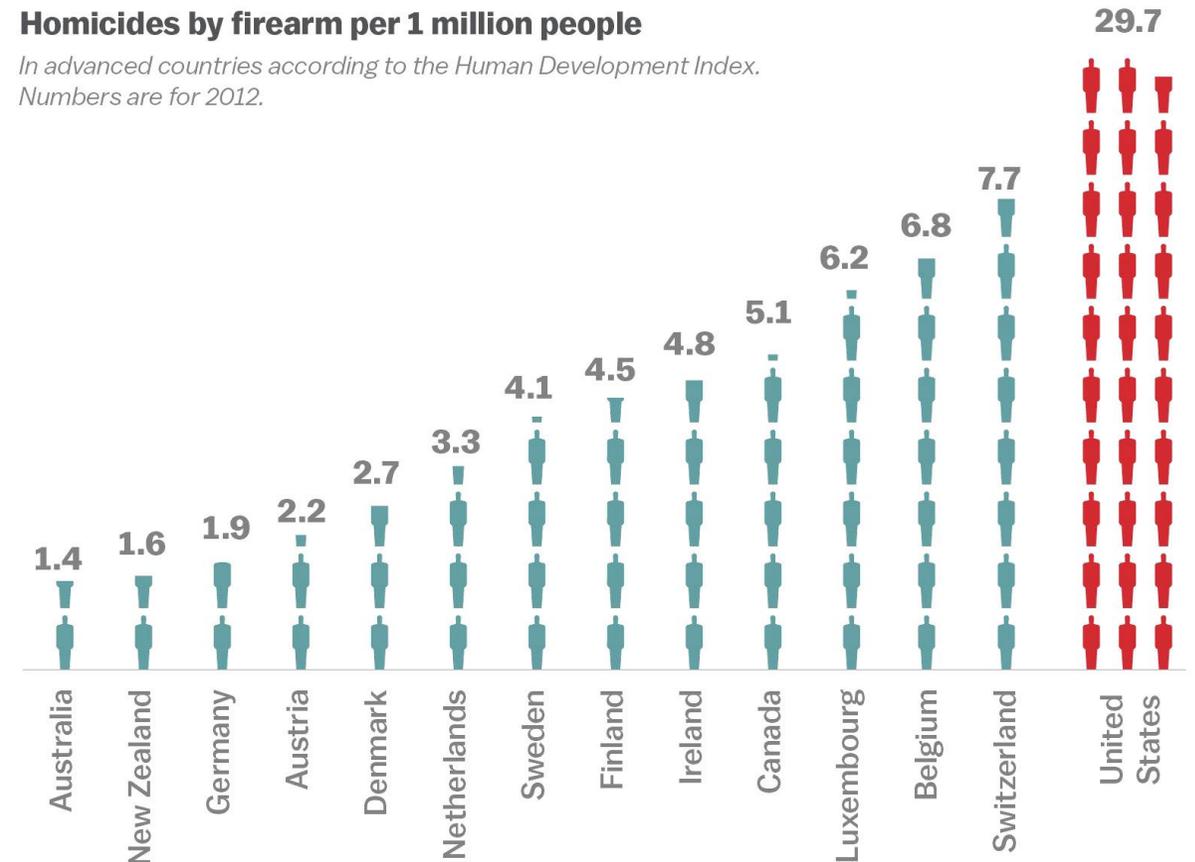
Note: Data labels shown for 1981, 1993, 2000 and 2010.

Source: CDC's National Center for Injury Prevention and Control Web-based Injury Statistics Query and Reporting System (WISQARS)

PEW RESEARCH CENTER

Homicides by firearm per 1 million people

In advanced countries according to the Human Development Index. Numbers are for 2012.



SOURCE: UNODC, Small Arms Survey, via The Guardian.

Vox

DATA VISUALIZATION TOOLS FOR STORY TELLING

Mediating factors help determine how interventions/programs influence outcomes- by building on:

- perceived trustworthiness and quality,
- people's domain-specific knowledge,
- beliefs shared by social groups
- political beliefs

Visualization

- increases the amount of information delivered
- decreases the cognitive and intellectual burden to interpret information for decision-making.

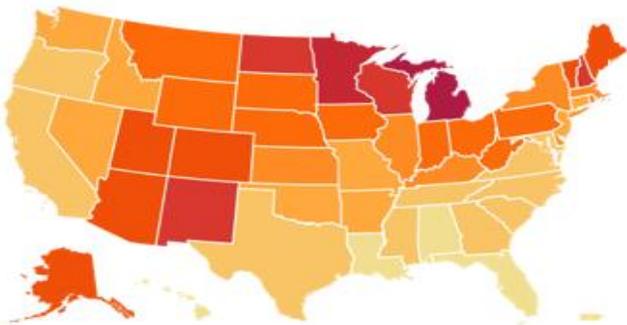
MontclairStateUniversity

Tracking the Coronavirus >

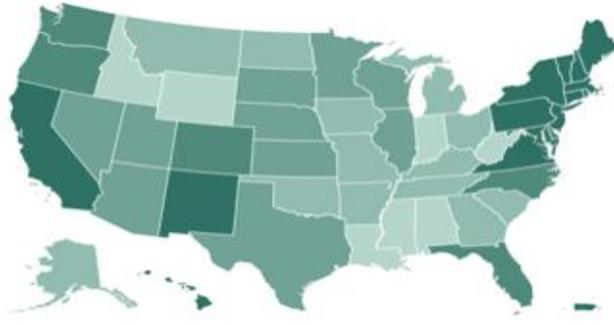
United States >

	Avg. on Nov. 20	14-day change	
New cases	92,580	+29%	
New deaths	1,115	-9%	

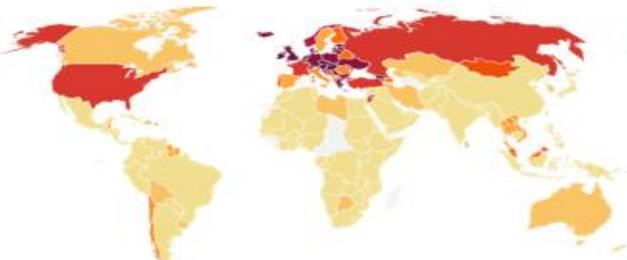
U.S. hot spots >



Vaccinations >



Global hot spots >



Global vaccinations >



NY Times and many other outlets have been creating these interactive charts and images since early in 2020.



So... all charts are not created equal!

More effective ones tell a story.

But real stories about real people tell it even better!



Let's start with this:

Think of and write in the chat,

a law that is named for someone specific



Blood is now screened for HIV. Ryan White was 13 years old when he received a blood transfusion for his hemophilia that was contaminated with HIV in 1984. Diagnosed with the Human Immunodeficiency Virus, White was told by the superintendent in the district that he would not be able to return to school. White faced AIDS-related discrimination from other students, school officials, and people in his town in Indiana. White and his family advocated against the stigma of the disease and for blood donations to be tested for HIV. President George H.W. Bush later signed "The Ryan White CARE Act" into legislation in 1990 (the same year as White's death), providing the country with assistance for comprehensive cost-efficient diagnosing and treatment services for communities disproportionately affected by the HIV epidemic.

Ryan White inspired a bipartisan law to help people affected by HIV and AIDS.



Megan's Law was introduced to help parents identify sex offenders living in their neighborhoods.



In 1994, 7-year-old Megan Kanka from New Jersey was raped and killed by a known registered sex offender who had moved into the house across the street from her family. The family hadn't been notified or informed that they'd been living across the street from a registered sex offender. After her death, the Kankas fought to have a law in place that would warn communities about sex offenders living in their neighborhood. Former President Bill Clinton signed the legislation into law in 1996 that stated all states were required to establish sex offender registries and establish community notification. Many states have since adopted different ways of carrying out Megan's Law.

In 2019, New Jersey Governor Phil Murphy signed 'Sami's Law' for ride-sharing after death of college student, (Robbinsville, New Jersey, native), Samantha Josephson.

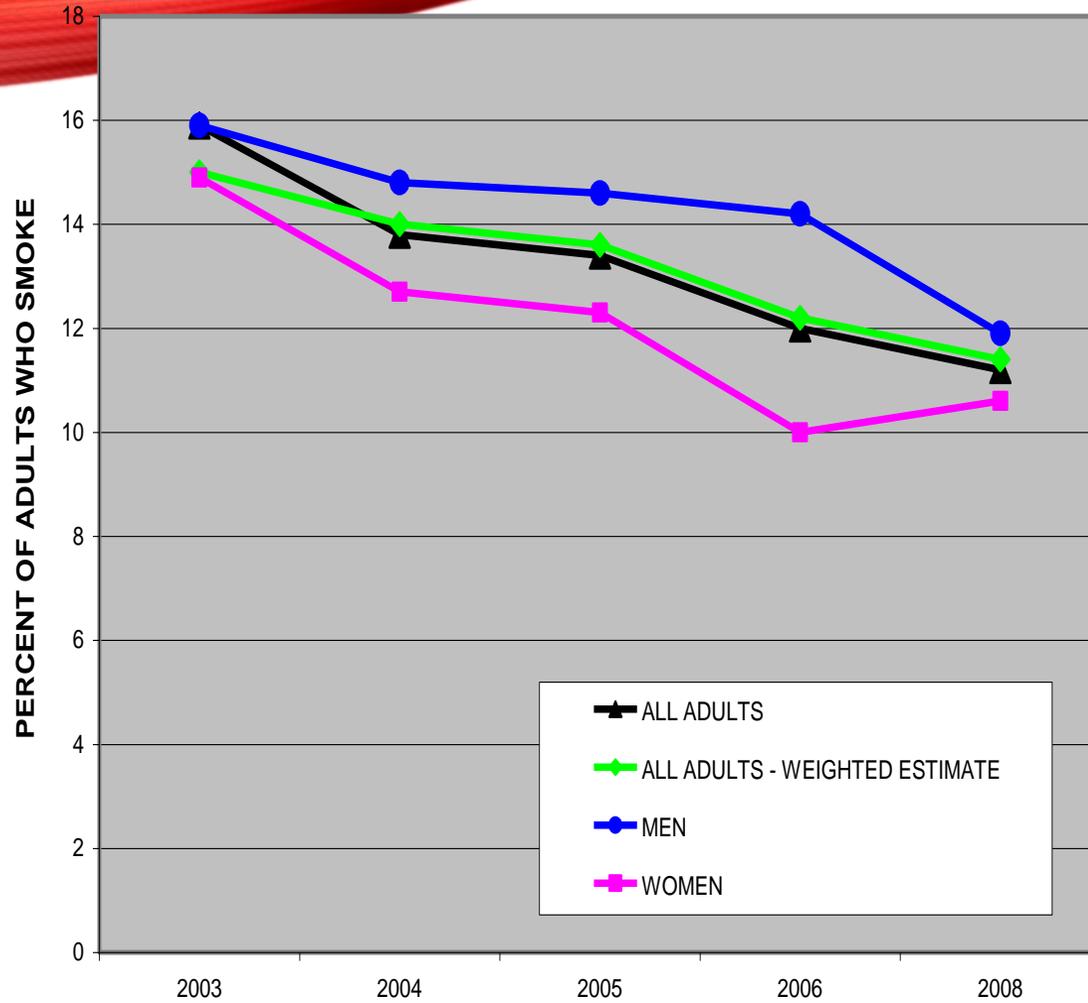


- *The law says the companies must issue "two credential placards" with the driver's name, photo and license plate number to go on the driver and passenger side back windows.*
- *Rideshare companies also must give its drivers two barcodes "or other machine-readable code that passengers can scan to confirm the identity," according to the governor's statement.*

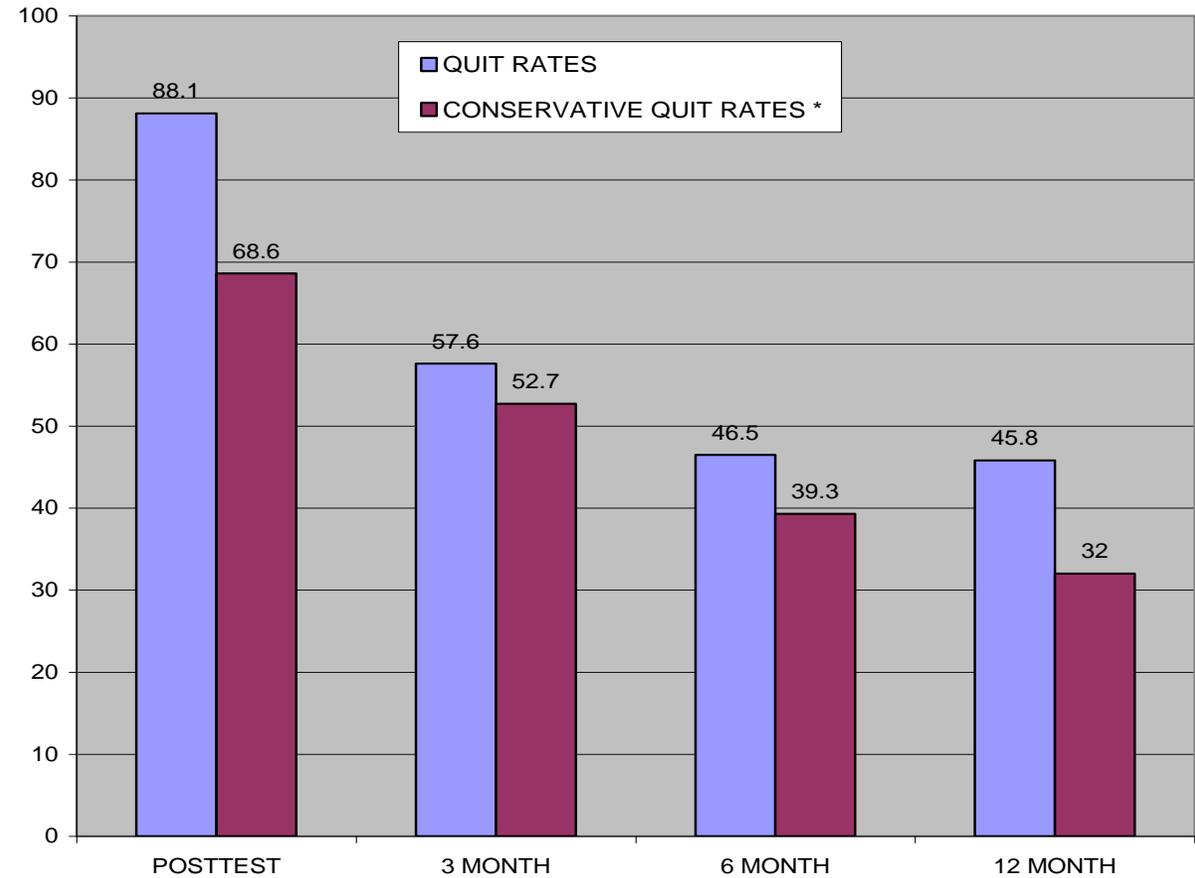
Josephson, a 21-year-old senior at the University of South Carolina, was alone when she requested an Uber ride early on March 29, Columbia police said. After she got into a stranger's car — mistaking it for her Uber — the child safety locks were activated, preventing her from escaping, police said.

Days after Josephson's slaying, [South Carolina legislators introduced](#) the "Samantha L. Josephson Ridesharing Safety Act" to require ride-sharing vehicles to have an illuminated, company-provided sign with the company's trademark or logo that can be seen in the dark. The bill was later signed by the South Carolina governor.

SMOKING RATES IN ROCKLAND COUNTY 2003-2008



PIOR SMOKING CESSATION RATES 2003-2008 (n = 919)



But the local newspaper (pre-Instagram, etc.) followed one of the participants in the smoking cessation workshops and made him a local hero!

2A Sunday, January 16, 2005 The Journal News R From Page One www.thejournalnews.com

Ex-smoker is healthier, credits county program

NOLAN, from 1A

That record translates into a 34 percent success rate — significantly higher than most programs, according to national experts.

Rockland's success in helping people stop smoking is getting widespread attention.

The program won an award over the summer from the National Association of County and City Health Officials and is being cited as an example that other public health agencies should follow.

The county's high success rate is helping researchers answer the complicated question of how best to help people kick the habit.

"There is no one cookie-cutter solution to the challenge," said William L. Furmanski, interim director of the Center for Tobacco Cessation, a Washington research organization run jointly by the American Cancer Society and the Robert Wood Johnson Foundation. "Different things work better for different people."

Estimates vary, but nationally only about 11 percent of those who try to quit are successful, experts say.

People who use a form of nicotine replacement therapy are more successful than those who quit cold turkey — about 20 percent are able to stop smoking, said Dr. Eric Westman, medical director of the Center for Nicotine Research and Smoking Cessation, a research institute at Duke University.

ure, which counts all participants, even those who cannot be reached and are presumed to still be smoking, the success rate is 30 percent.

The Rockland program uses an approach called tailoring — bas-

Stop smoking
To find out more about the smoking cessation programs offered by the Rockland County Health Department, go to the Web site www.quitoutrockland.com or call 845-364-2651.

Upcoming programs
■ **Quisqueya Sports Club** Spanish-speaking program Begins Tuesday. Class meets 6 to 7:30 p.m. Tuesday, Thursday, Jan. 25 and 27; Feb. 1, 8, 15 and 22; and March 1 and 8. Registration was last week.
■ **Helen Hayes Hospital** Lunchtime program Begins Jan. 26. Class meets 12:30 to 2 p.m. Jan. 26 and 28; Feb. 1, 4, 9, 16 and 23; and March 2, 9 and 16.
■ **Nyack Hospital** Lunchtime program Begins Feb. 8. Class meets 12:30 to 2 p.m. Feb. 8, 10, 15, 17 and 22; and March 1, 8, 15, 22 and 29.

Smokers' quit rates
Quit rate among those reached by Health Department

Post-test	Three months	Six months	One year
86%	56%	42%	46%
340 out of 412	344 out of 383	286 out of 352	138 out of 214

Very conservative* quit rate

Post-test	Three months	Six months	One year
71%	50%	34%	30%

*Calculated so that all participants who have not been reached are assumed to be smokers (this includes people who have moved, changed phone numbers, died, or do not agree to respond.)

Quit rate among 15 in Charles Nolan's group who completed the program

Post-test	Three months	Six months	One year
87%	53%	34%	Not yet collected



Kathy Gardner/The Journal News

Charles Nolan drinks coffee on his deck as he talks with his wife, Phyllis, Thursday outside their Stony Point home. Nolan is celebrating a year without smoking, and says he feels wonderful.

amount of nicotine gum to maintain his smoke-free status.

All participants learn behavior modification techniques to help them break their psychological addiction to cigarettes.

Experts suspect the tailoring approach is responsible for Rockland's high success rates.

"Tailoring is being talked about a lot lately," Furmanski said. "It's on the cutting edge of what seems

cluding Creole and Yiddish, Ferrera said.

More than 500 people have taken the class since it started three years ago. The county spends about \$1 million yearly on anti-tobacco programs. The funds come from the county's share of a settlement reached with tobacco companies for expenses related to diseases caused by smoking.

The classes are a good investment for the county because by reducing the number of smokers

returned, Nolan can walk for miles — something he does often to counter the nicotine cravings that still dog him — without becoming short of breath. He no longer wakes up at night gasping for air and sleeps more soundly than ever.

His emphysema, one of the few conditions that is not reversible, has not gotten any worse, he said.

He feels better than he has in years, despite gaining about 20 pounds since he stopped smoking.

"I'm a new person," he said. "I

- Charlie, 80+ years of age,
- Smoked 60 years
- Quit after his 2nd attempt
- A year after his last cigarette Charlie claims “he feels better than he has in years.”
- Two years later, Charlie was featured with a picture of his newborn grandson, (which, in the original article was part of his motivation to quit smoking)

OTHER EXAMPLES: STORY TELLING IN POLITICAL ADVOCACY IS COMMON



Shout Your Abortion is a decentralized network of individuals talking about abortion on our own terms and creating space for others to do the same, in art, media, and at community events all over the country.

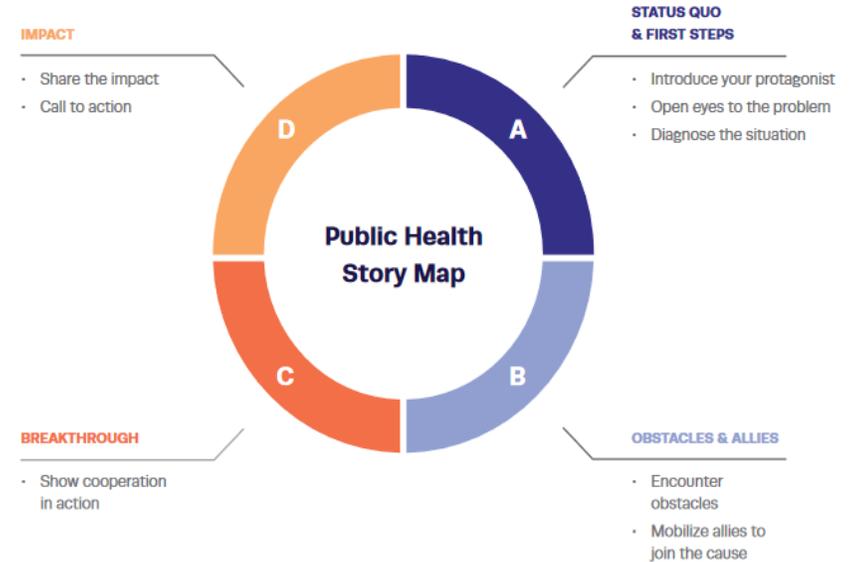
Abortion is normal. Our stories are ours to tell. This is not a debate.



The Public Health Story Map: How To Craft Strategic Stories

To help tell stories about public health, we've created the **Public Health Story Map**. It is adapted from the Hero's Journey, a tried-and-true model used to structure stories that capture people's attention and imagination. It is a "formula" based on research about storytelling across different cultures. Familiarizing yourself with the Public Health Story Map will not only help you craft stories—it will also help you identify stories by giving you clues about what elements you should be looking for.

The Public Health Story Map helps you structure your story around a narrative arc. There are eight steps that you can use to map out your story from beginning to end. Some stories may cover all the steps, and some may touch on only a few—and that's okay.



STORY TELLING RESOURCE FOR PUBLIC HEALTH

https://debeaumont.org/wp-content/uploads/2020/07/Storytelling-Toolkit-Final_.pdf

Communications

We strive to help your local health department communicate more effectively.

NACCHO develops resources and tools designed to improve the knowledge and skills of local public health officials, assist the efficient operations of local health departments across the nation, and help professionals stay on top of emerging threats to public health.

To ensure stakeholders and other interested parties are adequately informed, NACCHO disseminates high-quality, public

Data don't change people's minds...emotions do. Consider the difference:

"115 children died of diphtheria after an outbreak in Vietnam last year. Vaccinate your child today."

"Ha was three-years-old — a proud big sister who liked to help her mother sew. She loved her dog, her grandmother, and anything sweet. She died of diphtheria last year, in a small farming community just like this one. Vaccinate your child today."

A good story converts data to information that is personal and relatable. It can build understanding of a complex issue. It stirs emotions like laughter, anger, sadness, fear, or pride, which are critical for the long-term retention of information. It unites the listener with the teller in a shared sense of purpose. It creates empathy and motivates action. It builds emotion.

<https://ysph.yale.edu/news-article/storytelling-and-public-health-the-power-of-emotion-in-science/>

Storytelling and Public Health: The Power of Emotion in Science

“Most people are not data-driven,” said Baer, M.D., a Harvard-trained pediatrician and adjunct professor at the UCLA Fielding School of Public Health. “They are driven by emotional stories. Only then, can we provide the data, give them context, give them evidence. But they need to be moved by the story first.”

As an example, Baer mentioned that scientists know about 8 million metric tons of plastic are dumped into the world’s oceans annually creating a huge environmental problem and a life-threatening hazard to marine life. **Yet, it wasn’t until people saw the story of a sea turtle with a single straw painfully wedged up its nose that a worldwide movement to ban plastic straws finally took hold.**

“It took that one story to capture people’s hearts,” said Baer.

- 
- **Stories help us understand the people hidden behind numbers.**
 - **Stories come in all shapes and sizes (narrative, pictures, lengthy, a line)**
 - **Everyone has their own story, and they are all worth listening to.**

<https://lnct.global/blog/combating-vaccine-hesitancy-through-storytelling-four-key-insights-on-the-power-of-this-persuasive-approach/>

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Getting a Covid-19 vaccine is a personal decision. While many people believe that getting vaccinated is the quickest and most effective way to get back to the lives we knew before the pandemic, some members of our community are struggling with the decision. Here are a few stories from Clinica staff about why they decided to get the Covid-19 vaccine.



Belem

I decided to get vaccinated to protect myself, my



Rosie

After much speculation, I received the COVID-19



Kevin

Initially, I was hesitant to get the vaccine because

Disconnected scientific facts

While most people understand vaccination through personal experience, scientific facts are often reported in statistical form without relating them to the experience of their audience — for example the hospitalization rates of COVID-19 patients. These hospitalizations, because they are experienced by others, may not affect those who are resisting vaccination



When we look at conversations about vaccines on social media, we see that sharing personal stories remains one of the predominant ways in which people form their opinions about the reliability and safety of vaccines.



Reddit channel posts stories of anti-vaxxers dying of Covid, scaring fence-sitters into getting the shot

Reddit channel posts stories of anti-vaxxers dying of Covid, scaring fence-sitters into getting the shot

PUBLISHED SAT, OCT 16 2021 5:32 PM EDT

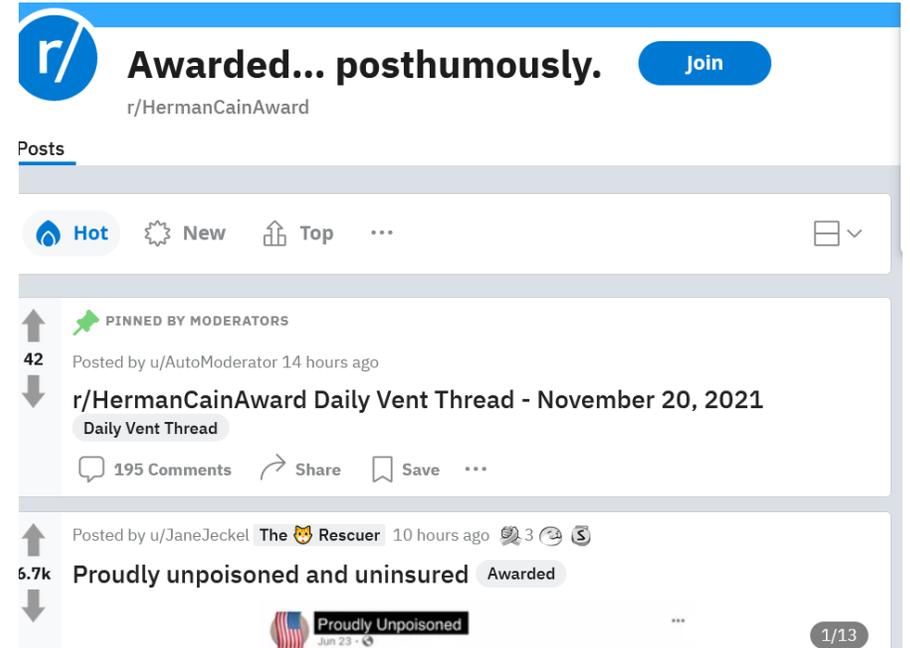


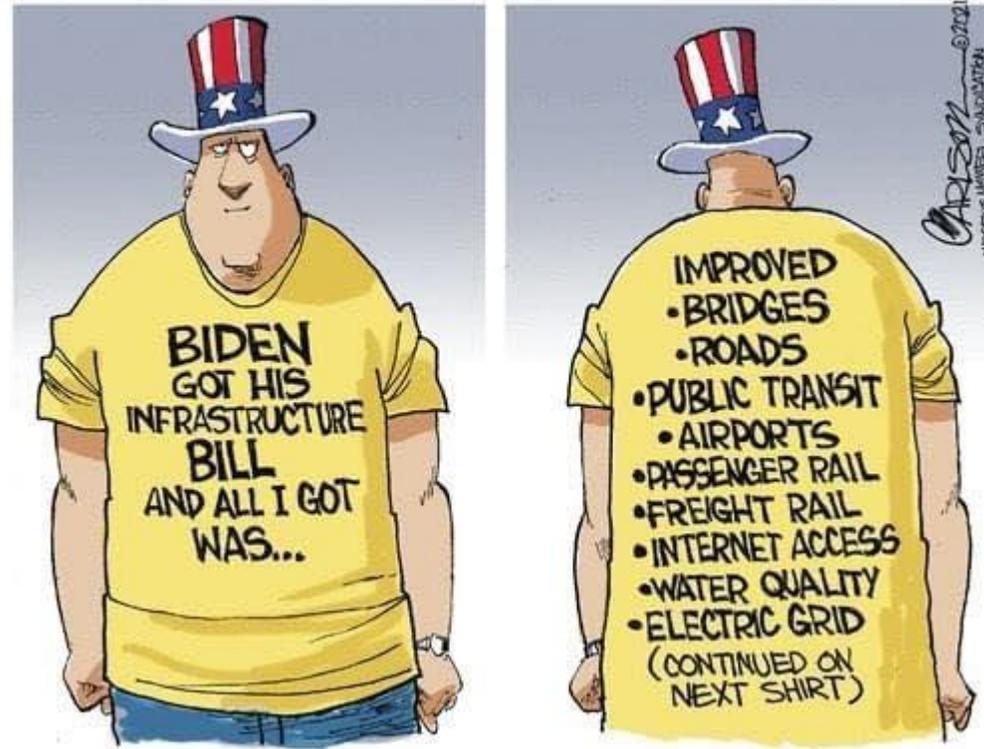
Salvador Rodriguez
@SAL19

SHARE

KEY POINTS

- A Reddit channel called *r/HermanCainAward* is filled with stories of people who mocked Covid-19 vaccines before eventually dying from the disease.
- Since the subreddit's creation in September 2020, it's expanded to more than 375,000 members, with the top posts garnering thousands of user interactions.
- "It really hits home when you literally see yourself in these people," said Sarah Ostrowski, who was convinced she should get vaccinated after spending time on the subreddit.





POLITICAL DISCOURSE HAS ALWAYS RELIED ON STORIES. In the social media environment, this has proliferated across the political divide.

Here a typical Facebook post - cartoon image used commonly in political discourse(November 20, 202. What common images or approaches are involved?

Kati Kariko Helped Shield the World From the Coronavirus

Collaborating with devoted colleagues, Dr. Kariko laid the groundwork for the mRNA vaccines turning the tide of the pandemic.



She grew up in Hungary, daughter of a butcher. She decided she wanted to be a scientist, although she had never met one. She moved to the United States in her 20s, but for decades never found a permanent position, instead clinging to the fringes of academia. Now [Katalin Kariko](#), 66, known to colleagues as Kati, has emerged as one of the heroes of [Covid-19 vaccine](#) development. Her work, with her close collaborator, Dr. Drew Weissman of the University of Pennsylvania, laid the foundation for the stunningly successful vaccines made by Pfizer-BioNTech and Moderna.

https://www.youtube.com/watch?v=emuTXyu_ei8

Kizzmekia S. Corbett, PhD, a research fellow and the scientific lead for the Coronavirus Vaccines & Immunopathogenesis Team at the National Institutes of Health (NIH), National Institute of Allergy and Infectious Diseases, Vaccine Research Center (VRC), helped develop the Moderna COVID-19 vaccine.



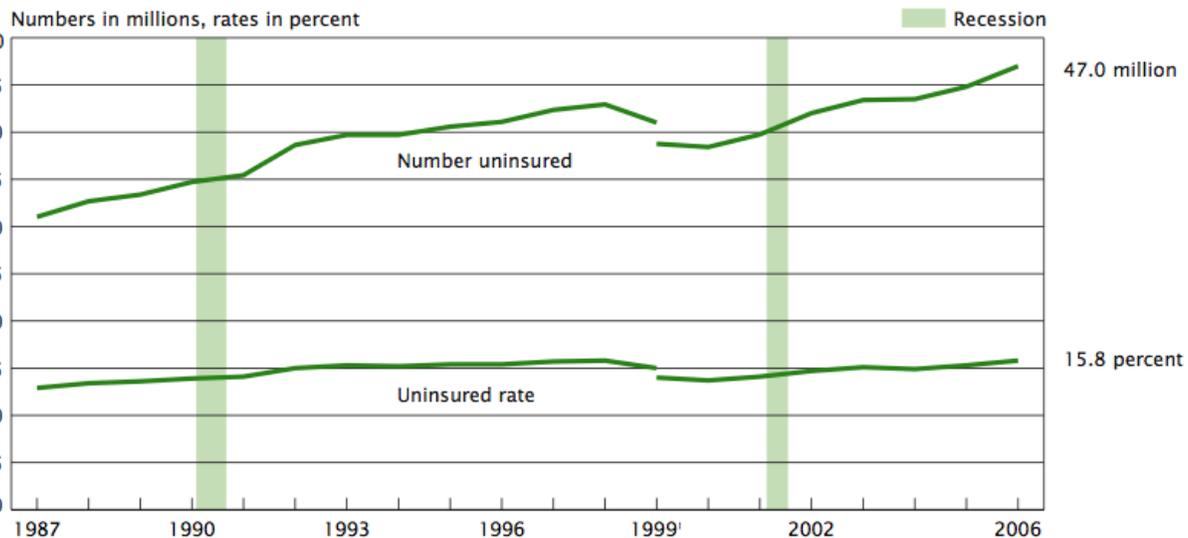
Write an example in the chat in which you used a good story to convince someone to do something or presented data using a story

JOE, A 25 YEAR OLD CONSTRUCTION WORKER, DRINKS HEAVILY ONE NIGHT, CRASHES HIS CAR, AND BREAKS HIS LEG, ARM, AND A FEW RIBS. HE DOESN'T HAVE HEALTH INSURANCE. DOES HE HAVE A RIGHT TO TREATMENT?

DOES JOE HAVE A RIGHT TO TREATMENT?



Figure 6.
Number Uninsured and Uninsured Rate: 1987 to 2006



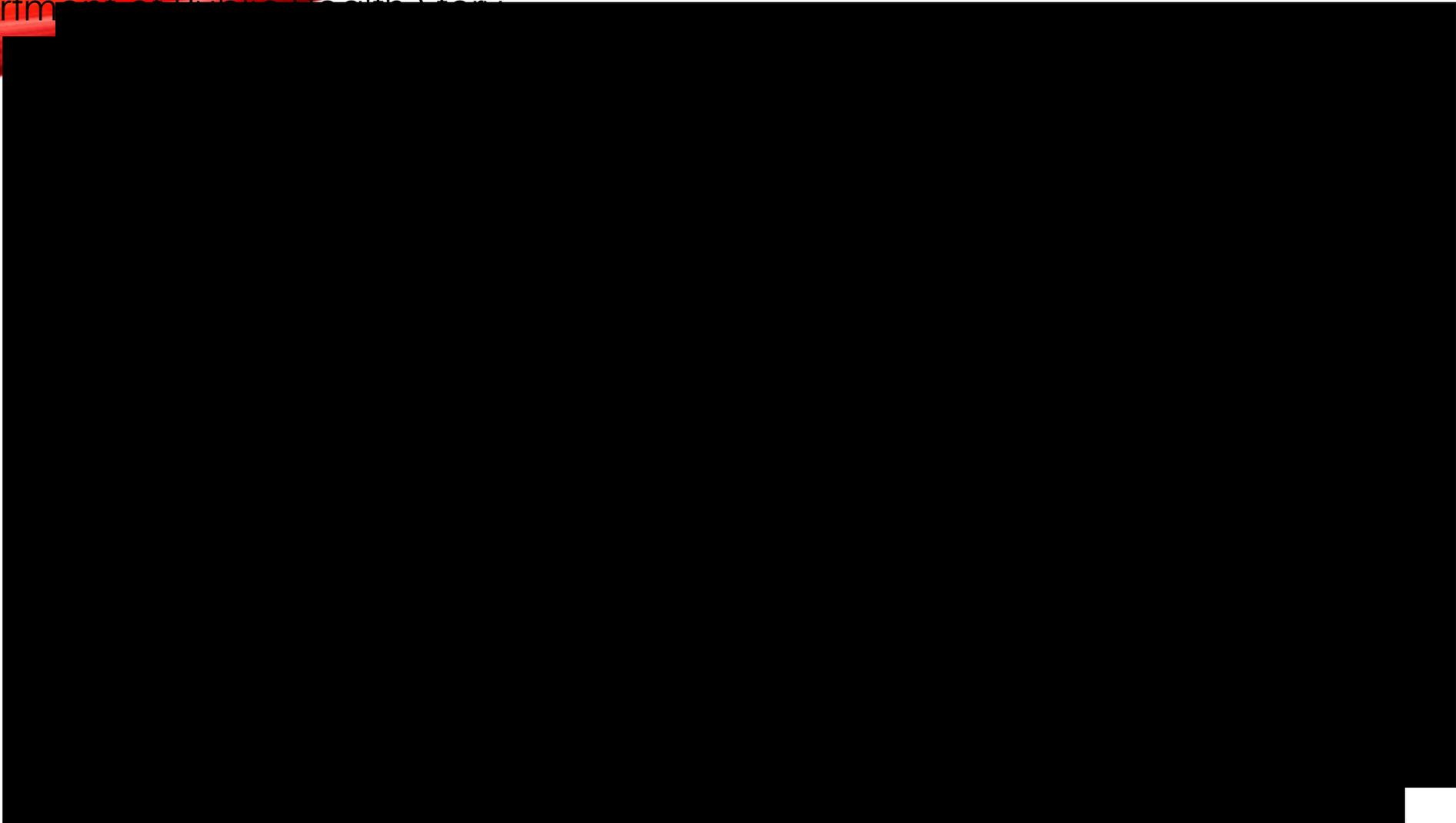
Notes: Respondents were not asked detailed health insurance questions before the 1988 Current Population Survey.

¹ Implementation of Census 2000-based population controls occurred for the 2000 ASEC, which collected data for 1999. These estimates also reflect the results of follow-up verification questions that were asked of people who responded "no" to all questions about specific types of health insurance coverage in order to verify whether they were actually uninsured. This change increased the number and percentage of people covered by health insurance, bringing the CPS more in line with estimates from other national surveys.

The data points are placed at the midpoints of the respective years.

Source: U.S. Census Bureau, Current Population Survey, 1988 to 2007 Annual Social and Economic Supplements.

Our Department of Public Health Services





IN SHORT...

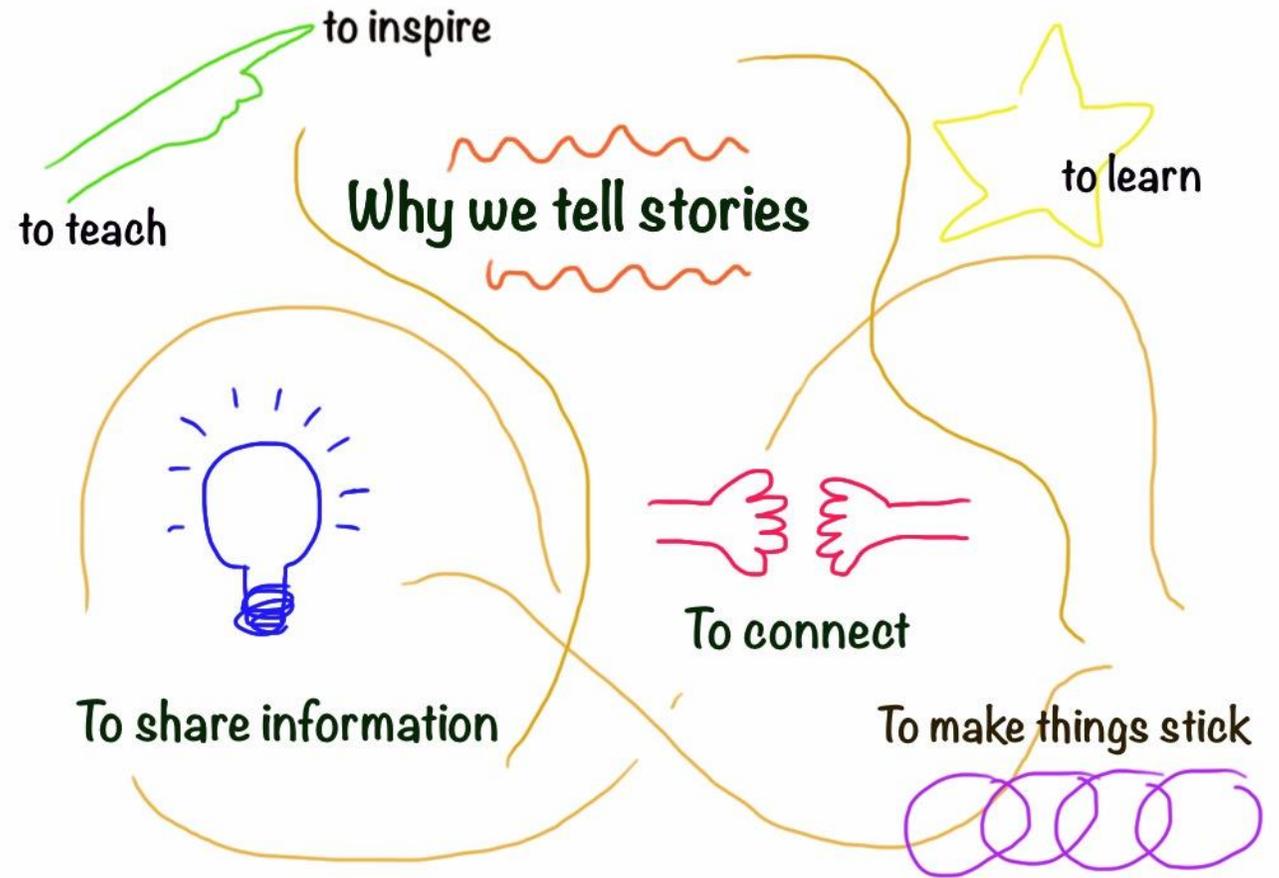
Stories help us understand the people hidden behind numbers

Stories come in all shapes and sizes- a narrative, a picture, a lengthy narrative, or just a line or two

Everyone has a story

Most of us love a good story!

More RESOURCES on the following slides....



RESOURCES ON ADVOCACY

- The NACCHO Advocacy Toolkit (Jan. 2020)
 - Education, advocacy, & lobbying examples
 - Congressional info + engagement tips
 - <https://www.naccho.org/uploads/downloadable-resources/Advocacy-Toolkit-February-2020.pdf>
- APHA Legislative Advocacy Handbook: A Guide for Effective Public Health Advocacy
 - http://www.kpha.us/resources/Documents/2015_Documents/APHA%20Legislative%20Advocacy%20Handbook1.pdf

Here and in the next few slides are the abstracts and locations of several recent high quality studies and papers on the power of stories in presenting data

[https://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(21\)00841-2/fulltext](https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(21)00841-2/fulltext)

Medicine is rich with storytelling, and scholars such as Rita Charon, Sayantani DasGupta, and Arthur Frank have argued convincingly for the role of narrative in the health humanities. Literary non-fiction is frequently used in medical and public health education. Narrative interventions, such as one that Aline Gubrium and colleagues piloted to investigate and address reproductive health inequities among adolescent women of Puerto Rican descent, are proliferating in public health. The stories they generate find their way into advocacy, reporting, and fundraising. News stories about COVID-19 that position doctors and epidemiologists as characters in an unfolding drama echo fictional depictions of them as heroes, and sometimes villains, in pandemic films such as *Contagion*.



Patient education is becoming increasingly important in today's healthcare environment as chronic conditions become more prevalent. Yet even when education is provided, patients may fail to follow recommendations given by healthcare providers because they do not understand the information provided to them. This article encourages the use of storytelling to present healthcare information in an easily understandable and captivating manner. After discussing health literacy concepts, the author compares the linear and experiential ways of learning and describes how storytelling can be an especially effective way of teaching experiential learners.

Citation: Day, V., (Sept. 30, 2009) "Promoting Health Literacy Through Storytelling"
OJIN: The Online Journal of Issues in Nursing Vol. 14, No. 3, Manuscript 6.

DOI: 10.3912/OJIN.Vol14No03Man06

A hesitancy inducing story about MMR vaccine side effect, reduced the otherwise effectiveness of scientific vaccine effectiveness messages

The recent decline in vaccination rates across Europe has led to outbreaks of vaccine preventable diseases such as measles. Although there have always been persons opposed to vaccination, in recent years an increasing number of parents are losing confidence in or are being complacent about vaccinating their children. Given the accessibility of information on the internet, parents are actively and independently researching vaccines. They are exposed to negative claims about vaccines that appeal to their emotions and emotional stories tend to make parents doubt vaccinations. By contrast, most positive vaccine messages focus on providing information through scientific data which has proven to be ineffective for some hesitant parents. Vaccine hesitancy can only be understood by looking at it from different perspectives and by exchanging knowledge between multiple fields of study. A transdisciplinary approach, in which individuals with different backgrounds search for solutions together, is necessary to be able to provide one or more solutions to the problem. Therefore, we spent eight months trying to solve part of this wicked problem from a transdisciplinary perspective. Based on literature reviews of different topics within vaccine hesitancy, interviews with hesitant parents, interactions with various stakeholders within and outside academia, and analyses of popular views on social media concerning vaccines, we question the effectiveness of the current pro-vaccine approaches. We also suggest adopting 'storytelling' that incorporates scientific data to inform parents and we argue that narratives are intrinsically persuasive as they are easier to understand and could prove more effective than traditional scientific communication. We expect that this strategy will contribute to the increase in and maintenance of high vaccination coverage rates and stop the circulation and outbreak of vaccine preventable diseases.

How Storytelling can Combat Vaccine Hesitancy: A Transdisciplinary Approach

December 2018 [Transdisciplinary Insights](#) 2(1):91-103 DOI:[10.11116/TDI2018.2.4](https://doi.org/10.11116/TDI2018.2.4)

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Increasingly, health communication practitioners are exploring the use of narrative storytelling to convey health information. For this study, a narrative film was produced to provide information about the Human Papillomavirus (HPV) and cervical cancer prevention. The storyline centered on Lupita, a young woman recently diagnosed with HPV who informs her family about HPV and the availability of the HPV vaccine for her younger sister. The objective was to examine the roles of identification with characters and narrative involvement (made up of three dimensions: involvement, perceived relevance, and immersion) on perceived response efficacy, perceived severity, and perceived susceptibility to HPV and behavior (discussing the HPV vaccine with a health care provider). A random sample of 450 European American, Mexican American, and African American women between the ages of 25 to 45 living in the Los Angeles area was surveyed by phone before, two weeks after, and six months after viewing the film. The more relevant women found the narrative to their own lives at two weeks, the higher they perceived the severity of the virus and the perceived response efficacy of the vaccine. Also at two weeks, identifying with characters was positively associated with perceived susceptibility to HPV but negatively associated with perceived severity. At six months, identification with specific characters was significantly associated with perceived threat and behavior. These findings suggest that different aspects of narrative health messages should be manipulated depending on the specific beliefs and behaviors being targeted. Implications for narrative message design are discussed.

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5608451/>

There is growing implementation of storytelling as a specific application of narrative in public health. As the field's latest epoch evolves to consider cultural determinants, reimagination of how scientists conceptualize, operationalize, and capture populations' unique elements is necessary, and storytelling provides a genuine and efficacious methodology that can assist with that reimagination. Professionals are creating more spaces that demonstrate how storytelling elucidates, promotes, and supports contextual factors that are not captured by orthodox methodologies. However, more opportunities are needed to exhibit storytelling's impact on capturing the nuances in human experiences, such as those of historically and systemically underrepresented populations. This study synthesizes the past decade of research in public health and related fields that primarily utilized storytelling and reports significant implications. Additionally, this study highlights explorations in public health that primarily use storytelling as a research and practice approach. Each case study includes a description of the background and aims, elaborates on storytelling's utilization, and discusses findings, observations, and future directions. Finally, this study discusses conceptual issues in public health raised by use of storytelling, such as how to best capture impact on human beings and the importance of context. This article's goal is to present current evidence of critical reevaluations to the epistemological, conceptual, and practical paradigms within public health through storytelling. Additionally, this article aims to provide support and empowerment to public health scientists considering creative approaches to better acknowledge and appreciate humanity's inherent subjectivity.

<https://journals.sagepub.com/doi/full/10.1177/10901981211009741>