

Policy Approaches for Chronic Disease Prevention: Are we making legislation or sausage?



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Questions for today

1. Describe evidence-based public health policy and practice and why it matters.
2. Describe the impacts of policy on chronic disease prevention and health promotion.
3. Identify better ways to connect science with practice and policy (both Big P and small p).

What is evidence?

Definition

“The available body of facts or information indicating whether a belief or proposition is true or valid.”

Sources

- Scientific literature in systematic reviews
- Public health surveillance data
- Advice from a friend or colleague

Audiences

- Practitioners
- Policy makers
- The general public
- Researchers

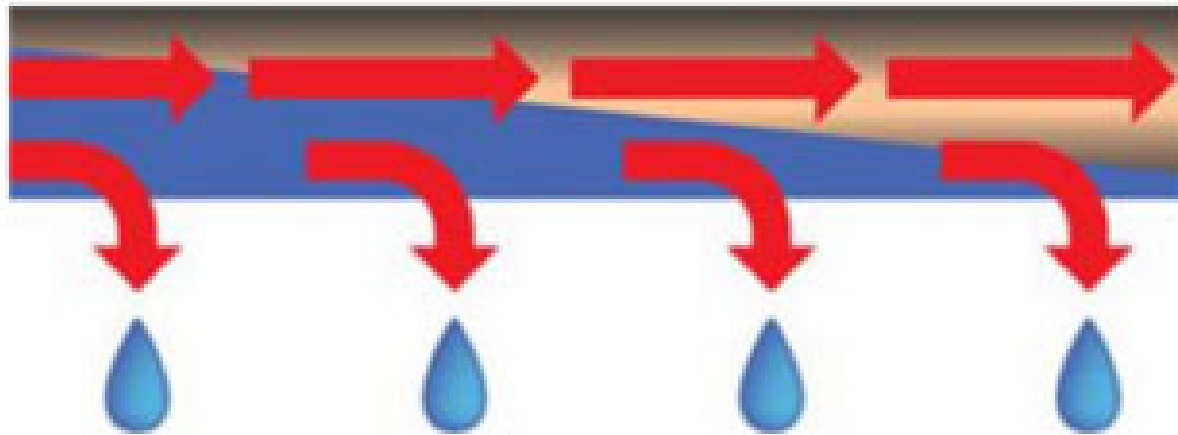
Like beauty, it's in the eye of the beholder...

The metaphors abound...

Leaky pipes

17 years

Original
research
evidence



Benefits to
patients &
populations

14% success

Original
research/
peer review

Research
synthesis

Guidelines

Implementation

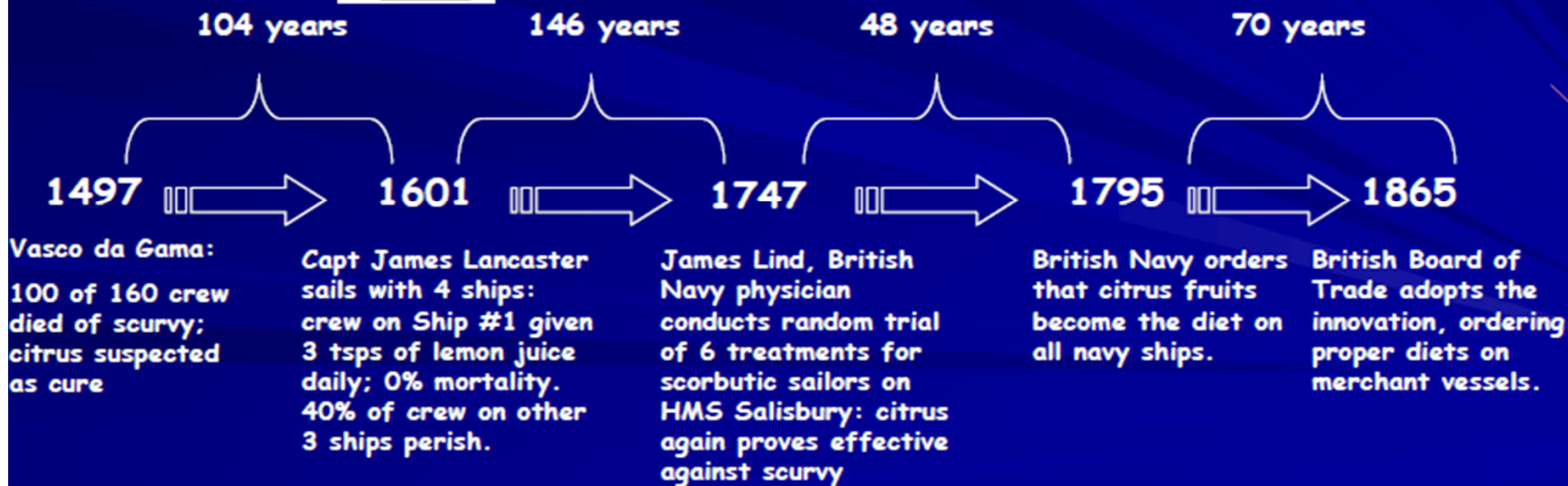
“We have the best medical schools, the most sophisticated labs, and the most advanced training of any nation on the globe. Yet we are not doing a very good job harnessing our collective knowledge and experience on behalf of better medicine. Less than one percent of our health care spending goes to examining what treatments are most effective. ***And even when that information finds its way into journals, it can take up to 17 years to find its way to an exam room or operating table.***”

--Barack Obama, 2009 speech to the AMA

The gap: scurvy

What progress have we made in getting evidence into practice?

Total elapsed time from Lancaster to adoption: 264 years



“If you build it...”



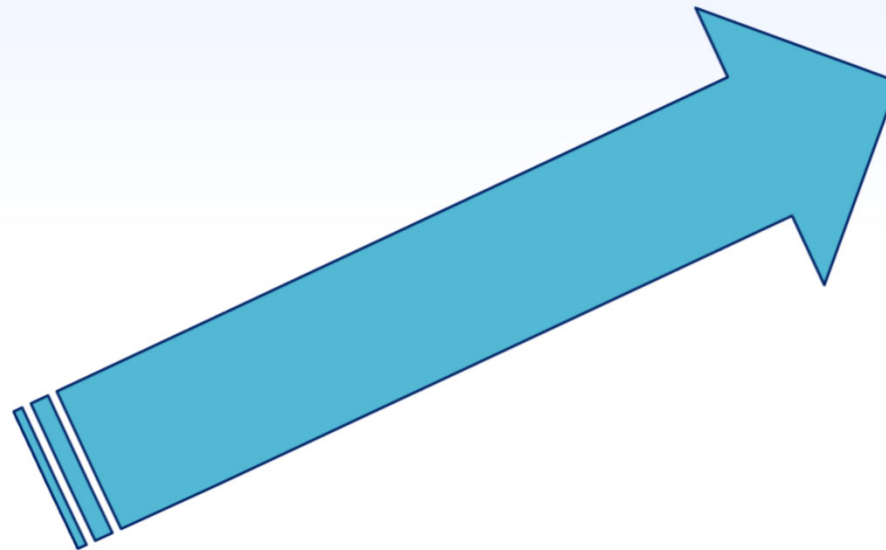
Making sausage



A few important patterns and trends

People are living (much) longer

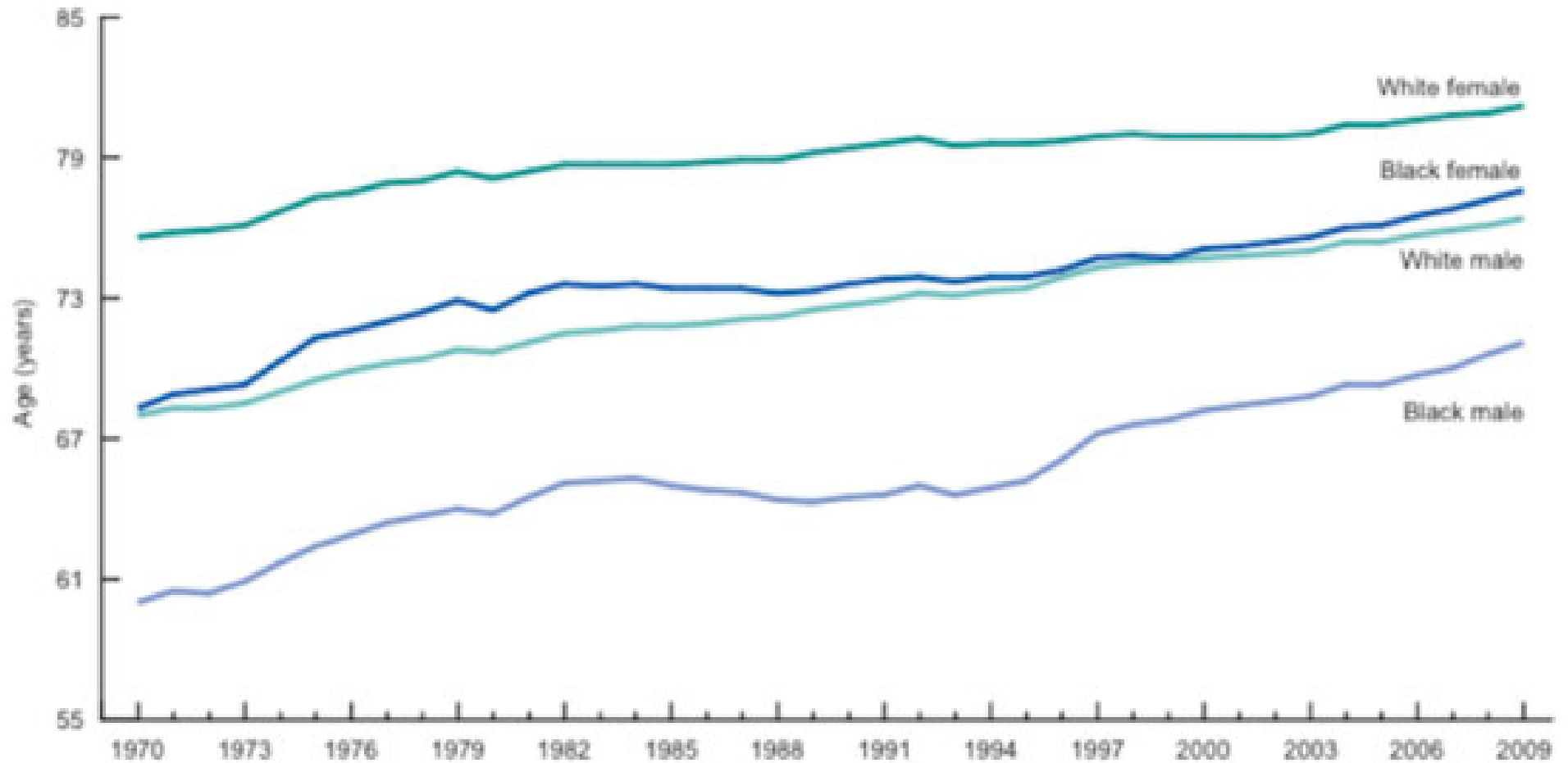
In 1900,
47 years



In 2018,
79 years

Remarkable progress!!

Trends in life expectancy by race and gender 1970-2009

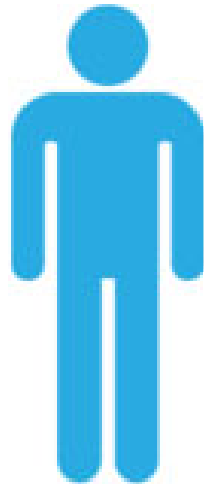


What would you do with an extra 18 years?

Least Advantaged Most Advantaged

Average life expectancy, 2010
Zip code 63106 (N StL City)

67
years

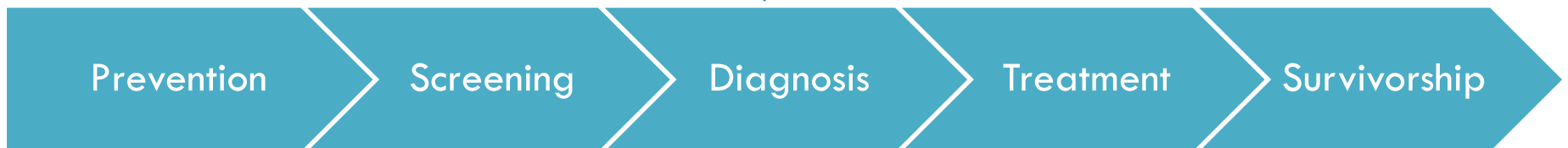
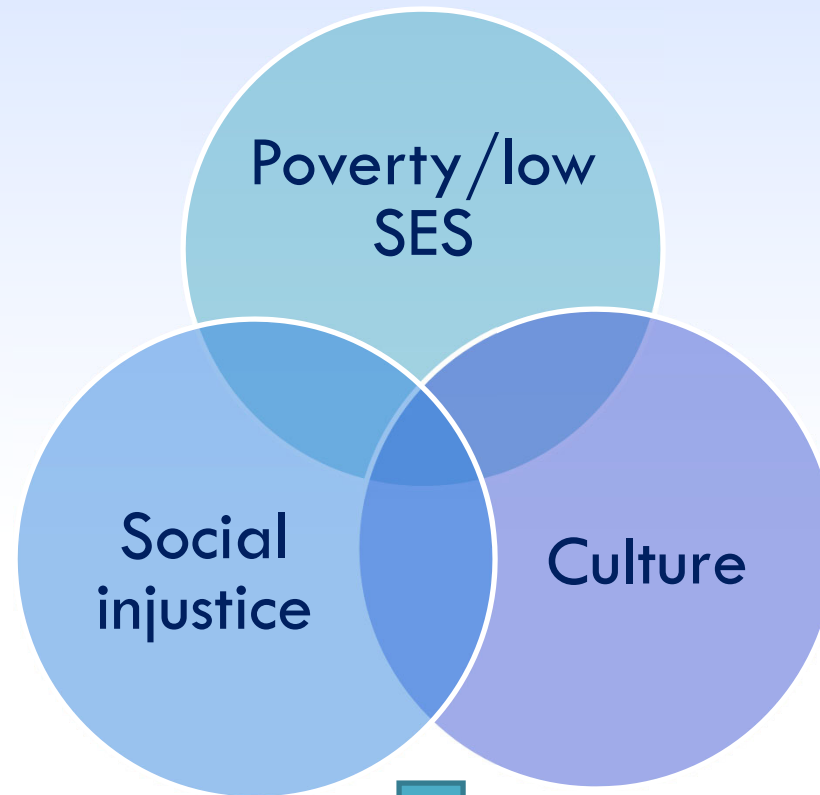


Average life expectancy, 2010
Zip code 63105 (Clayton)

85
years

Source: For the Sake of All

Social determinants largely define health



Cancer Control Continuum

What issues related to social determinants have been uncovered during the COVID pandemic?

Policy matters:

Top 10 public health achievements

- Examples
 - Vaccination
 - Motor-vehicle safety
 - Safer workplaces
 - Fluoridation of drinking water
 - Recognition of tobacco use as a health hazard
- Each of these advances involved policy and public health

Consider types of policy

- Formal laws, codes, regulations (Big P)
 - ACA
 - Clean indoor air policy
- Organizational policy (small p)
 - Often quicker in private sector
 - Actions of a public health agency leading to science-based practice
 - Local policy change, use of evidence-based interventions, effective partnerships

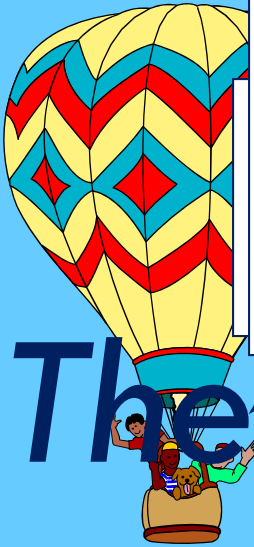
Domains of evidence-based public health policy

Domain	Objective	Data Sources
Process (the “how”)	To understand approaches to enhance the likelihood of policy adoption	<ul style="list-style-type: none">• Key informant interviews• Case studies
Content (the “what”)	To identify specific policy elements that are likely to be effective	<ul style="list-style-type: none">• Systematic reviews• Content analyses
Outcome (the “why” & “how much”)	To document the potential impact of policy	<ul style="list-style-type: none">• Surveillance systems• Natural experiments tracking policy-related endpoints

The policy paradox

- Perhaps the largest impact on population health
 - Learn from smallpox, tobacco, seat belts (as victories)
 - Learn from gun violence, refugee displacement, inequalities (as ongoing challenges)
- Yet we may have the fewest skills
 - The inverse evidence and inverse prevention laws
 - Out of comfort zone (esp. for the politics part)
 - Requires some new thinking and actions
 - Limitations in government agencies

How well do researchers and
policy makers connect?



Because what you told me is absolutely

correct but

Yes, how useless

did you know?

The problem

Because you don't know where you are, you don't know where you're going, and now you're blaming me

Yes

You must policy n



How well do researchers and
practitioners connect?

Preferred methods for disseminating or learning about the latest research-based evidence

Method	Researchers % (rank)	Local practitioners % (rank)	State practitioners % (rank)
Academic journals	100 (1)	33 (4)	50 (2)
Academic conferences	92.5 (2)	22 (5)	17.5 (6)
Reports to funders	68 (3)	--	--
Press releases	62 (4)	12.5 (7)	--
Seminars or workshops	61 (5)	53 (1)	59 (1)
Face-to-face meetings with stakeholders	53 (6)	11 (6)	15 (7)
Media interviews	51 (7)	1 (9)	--
Policy briefs	26 (8)	17 (6)	30 (4)
Email alerts	22 (9)	34 (3)	40 (3)
Professional associations	--	48 (2)	24.5 (5)

What are policies that have large (positive) impacts on chronic disease risk?

- Policy examples that are likely to improve disparities?
- Policy examples that might worsen disparities?

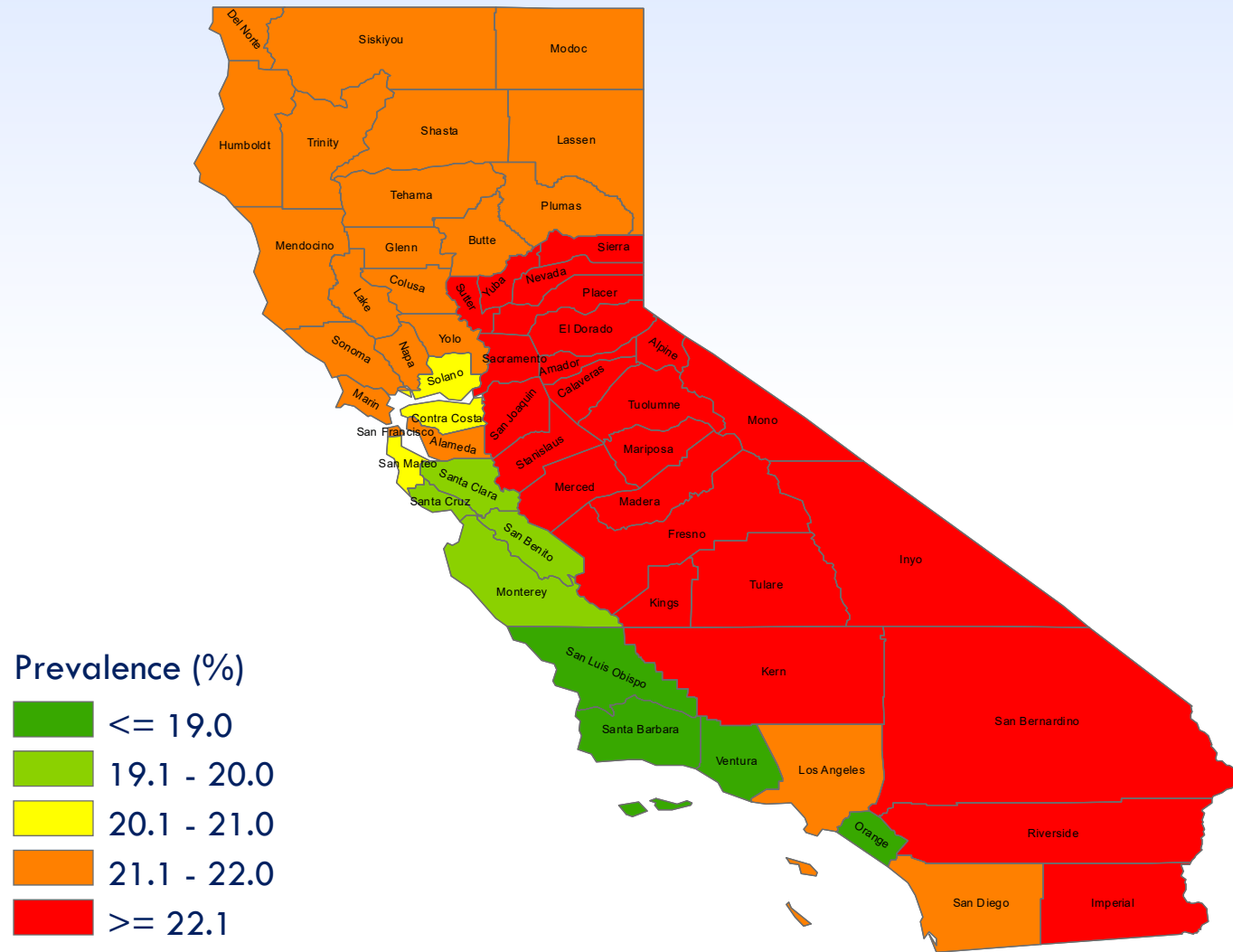
Examples

<p>Food and nutrition</p>	<p>Tax on unhealthy food/soft drinks [25] Food subsidy programmes for low income women [21, 22] Free school fruit subsidy [23, 25]</p>	<p>Mandatory fortification to increase folate intake [31] National salt reduction strategy [32] Trans-fatty acid ban in all food establishments and mandatory calorie labelling [25, 34, 35] Water fluoridation [36] Combined education campaign and nutritional labelling regarding salt [28]</p>	<p>General nutrition and/or physical activity information campaign [42] Folic acid mass media campaign [31, 43] Health information campaigns (e.g. 5 a day) [25, 32] Sodium reduction information campaigns [28] Combined education and nutritional labelling for sodium reduction [28] National tooth brushing education campaign [27] Nutrition education programme [33]</p>		
<p>Reproductive health services</p>			<p>Reproductive cancer screening campaign [45]</p>		<p>Population cancer screening for female cancers [48]</p>

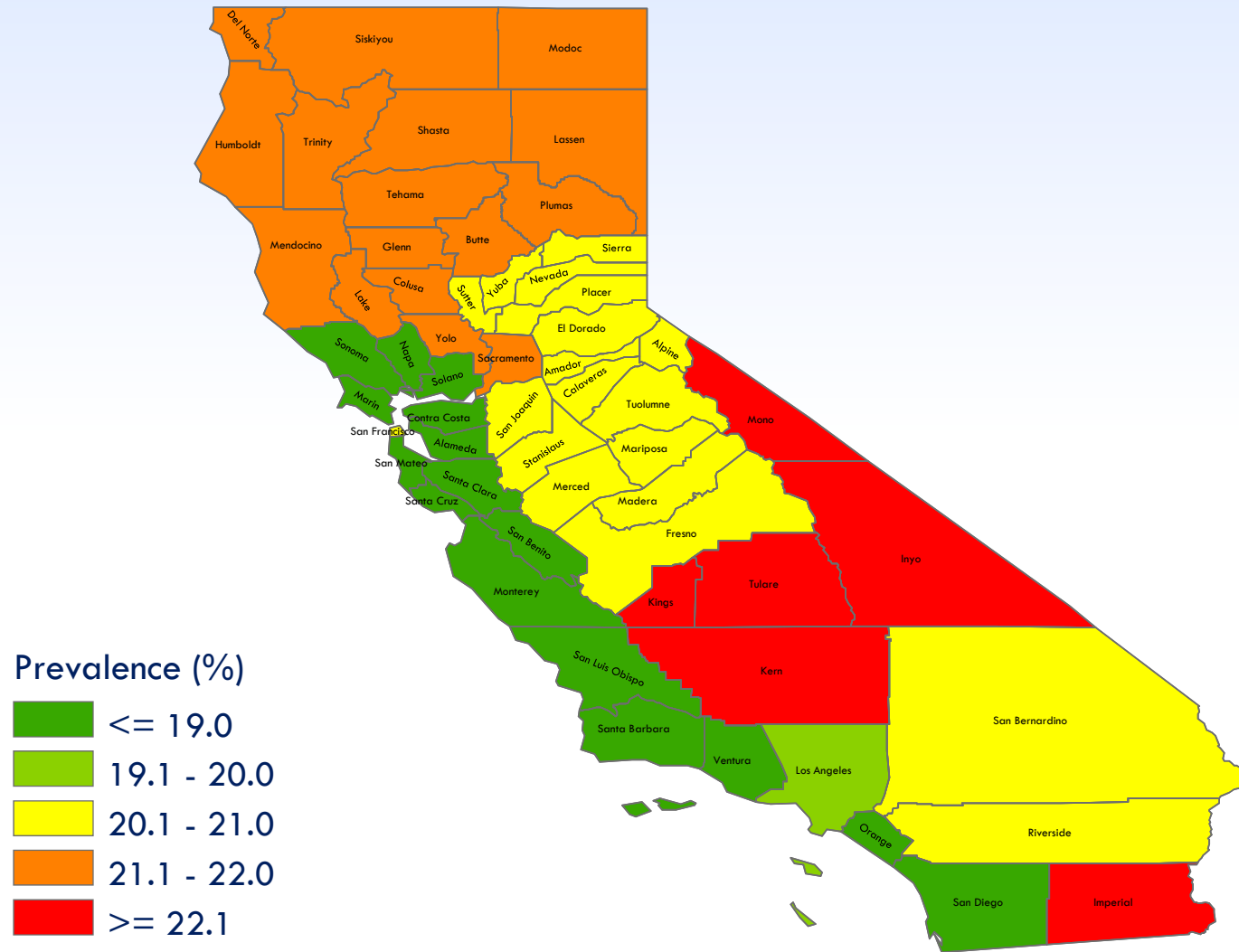
Smoking in CA

- Early research in 1950 linked smoking to lung cancer
- California Proposition 99
 - smoking as key public health issue
 - effects of price increases
 - 0.25 per pack increase in 1988
 - earmarked for tobacco control with strong media component
 - for 1988-93, doubling of rate of decline against background rate

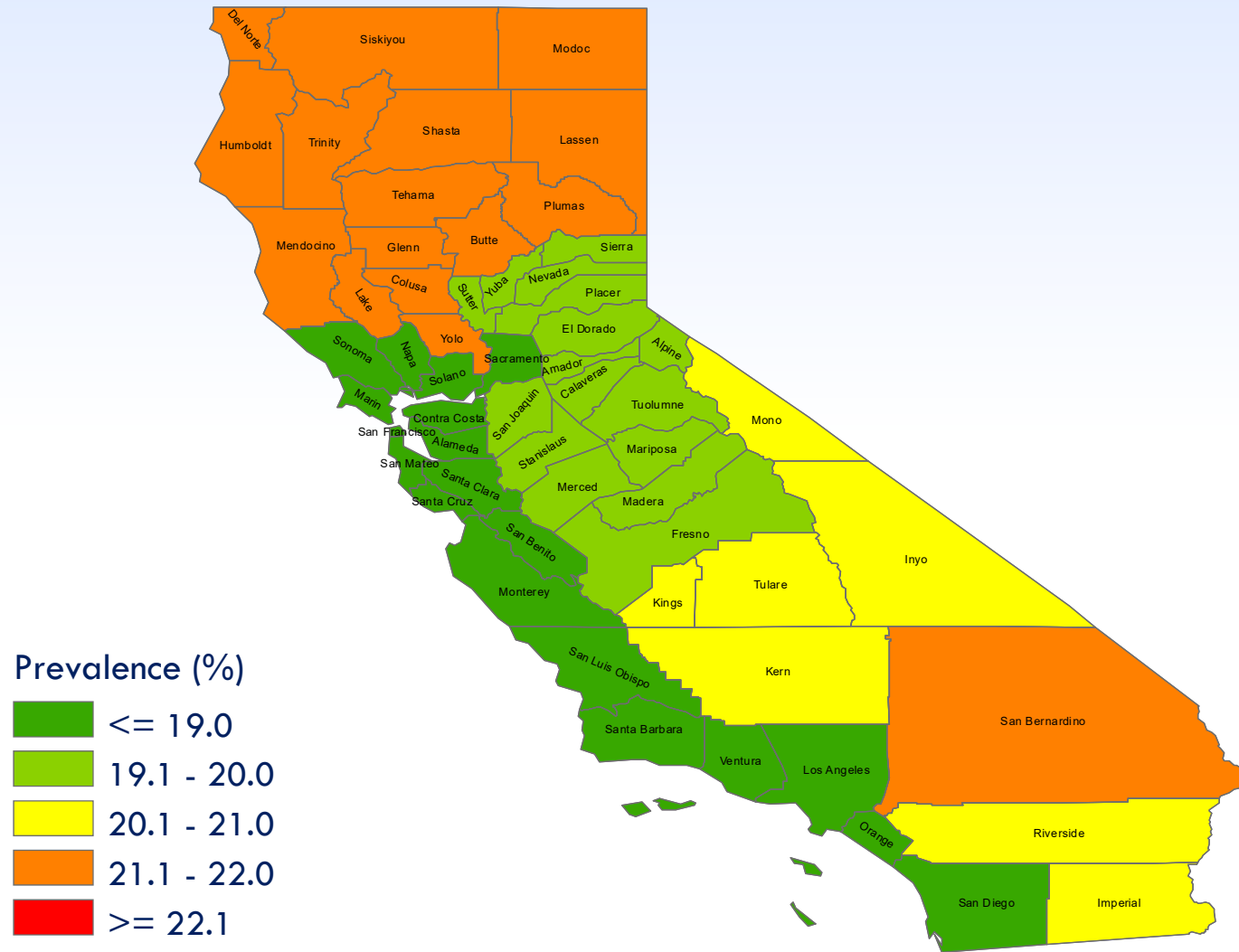
California adult smoking prevalence by region, 1990



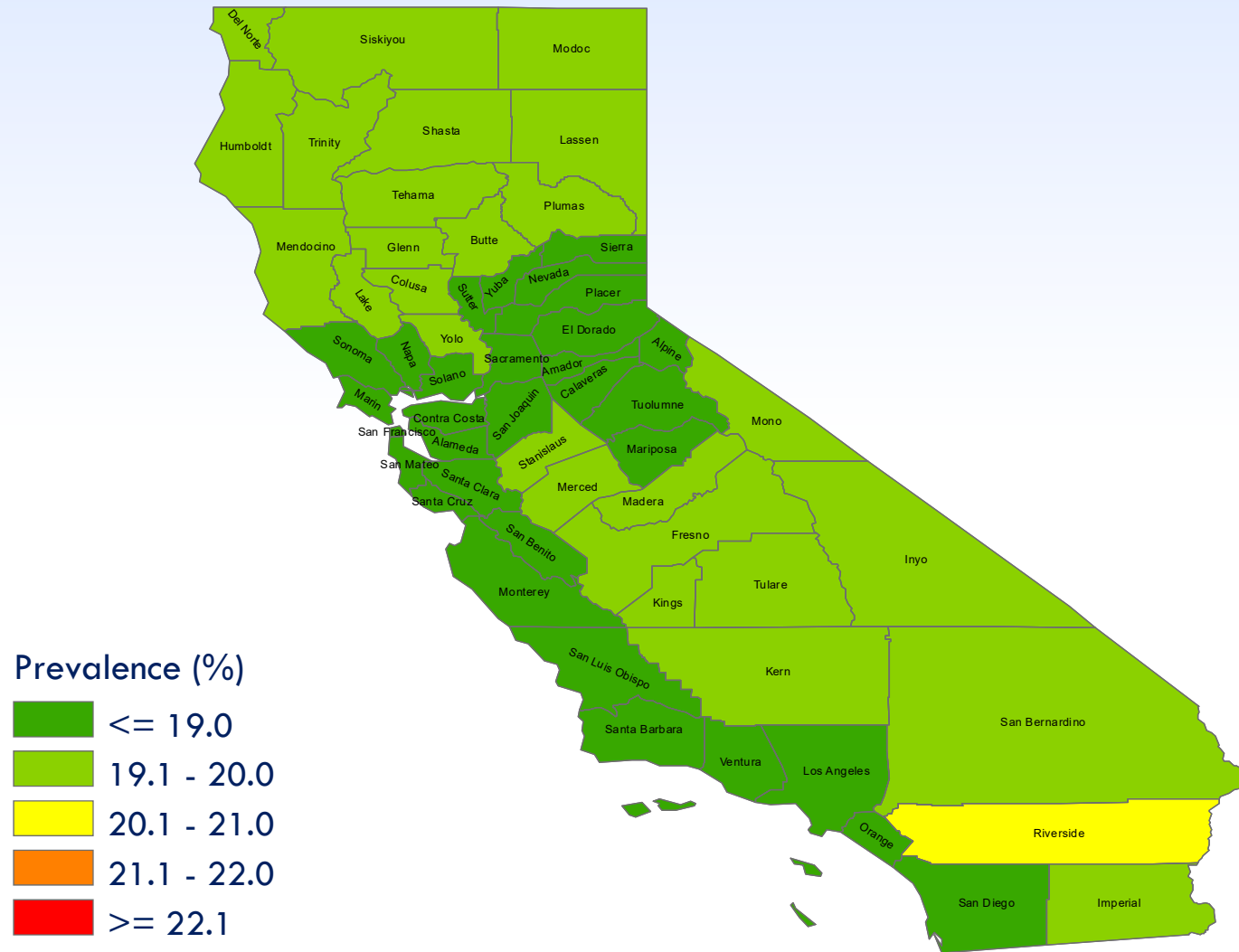
California adult smoking prevalence by region, 1996



California adult smoking prevalence by region, 1999



California adult smoking prevalence by region, 2002



Sample Media Spots (part of the “how”)

<http://www.youtube.com/watch?v=2kZL5HyWVDw>

<http://www.youtube.com/watch?v=BVUcsTTple0&NR=1>

<https://www.youtube.com/watch?v=wAaGbsHBacE>

Some Remedies

Evidence-based practice and policy

1. Make better sausage

Leadership matters:

Macro level priority setting

“Every gun that is made, every warship launched, every rocket fired signifies, in the final sense, a theft from those who hunger and are not fed; those who are cold and are not clothed. This world in arms is not spending money alone. It is spending the sweat of its laborers, the genius of its scientists, the hopes of its children.”

--Dwight D. Eisenhower, 16 April 1963

Better connect the message and the audience

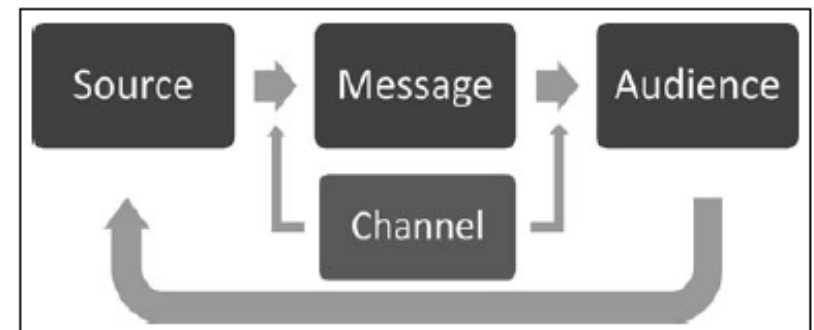


FIGURE Model for Dissemination of Research

Source: The effective persuader



Seen as

- Delivered by someone trusted
- Unbiased
- Relevant to constituent

Dissemination preferences

- One size does *NOT* fit all
- Ideology drives dissemination preferences more than political party
 - For example
 - The more ideological conservative a legislator is, the more they trust research from industry sources
 - Fiscally liberal legislators identify research telling a story as very important most frequently
 - All groups care about costs

Policy Briefs

The 3 - 30 – 3 rule

Children's Life Expectancy Being Cut Short by Obesity

BOSTON, March 16 - For the first time in two centuries, the current generation of children in America may have shorter life expectancies than their parents, according to a new report, which contends that the rapid rise in childhood obesity, if left unchecked, could shorten life spans by as much as five years.

Using infographics in policy briefs

Open and shut: the case for **Open Streets** in St. Louis

OPEN STREETS INITIATIVES open spaces normally reserved for cars to people, providing a safe environment to walk, bike, dance, play, and socialize, promoting healthy and active living and building community. Researchers in the Brown School at Washington University in St. Louis have received funding from the Robert Wood Johnson Foundation to evaluate St. Louis' 2011 Open Streets events, and to build a campaign encouraging participation by urban youth and families in 2012. With over 1,800 participants in 2011 alone, leadership from the Mayor's office, and generous sponsorships, St. Louis has the potential to be a national leader in Open Streets. In fact, our evaluation survey is featured as a model resource by the Open Streets Project, a national coordinating collaborative. Working together, we can grow St. Louis Open Streets in 2012 and beyond.




What do people think about Open Streets?

We surveyed 119 Open Streets participants at the two 2011 events. We asked them to answer some questions about Open Streets, and its effect on St. Louis:

"Open Streets is a free event that welcomes everyone."  **99%** Agree or strongly agree

"Open Streets strengthens our community"  **100%** Agree or strongly agree

"How safe do you feel at Open Streets?"  **97%** said "very safe"

"Does Open Streets change your feelings about the city?"  **94%** said "yes - positively"

Open Streets 2011 by the numbers

108
MINUTES
Average time spent at Open Streets

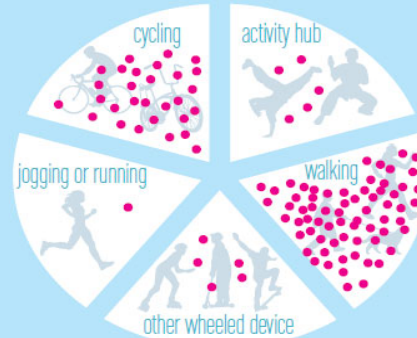
58%
Participants who were attending their first Open Streets

73%
Participants who spent money at a restaurant or store on the Open Streets route

68%
Participants who became aware of a store or restaurant that was new to them

What do people do at Open Streets?

Open Streets participants could place a sticker on a poster we made to tell us what their main activity was:

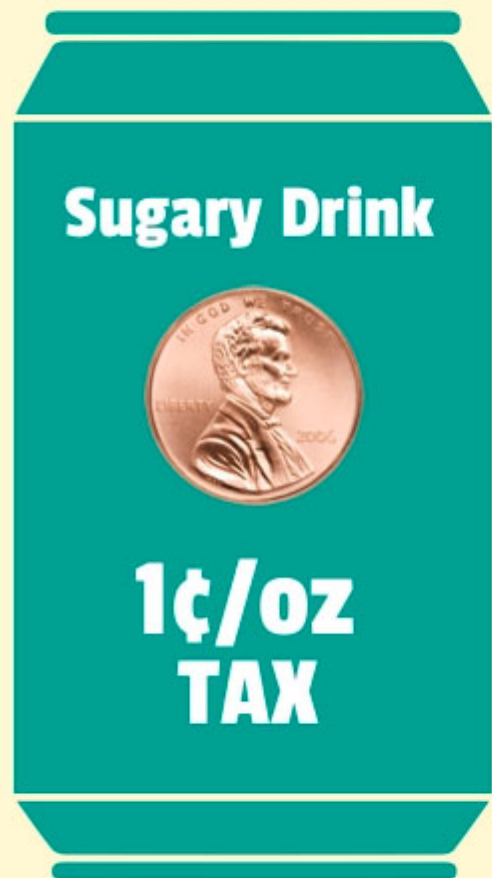


contact us

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OPEN STREETS 2011

HEALTH BENEFITS OF ILLINOIS SODA TAX



=



\$561 million

for health, Medicaid
and other needs



116,000

Fewer Cases of
Obesity by 2025



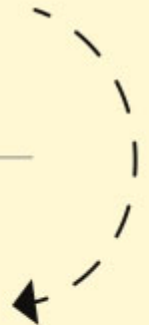
9%

Drop in
Diabetes *



\$733 million

Net Health Care Savings
(over 10 years)



**reduction in new cases of diabetes over a one year period.*

Source: CHOICES report from Harvard's T.H. Chan School of Public Health



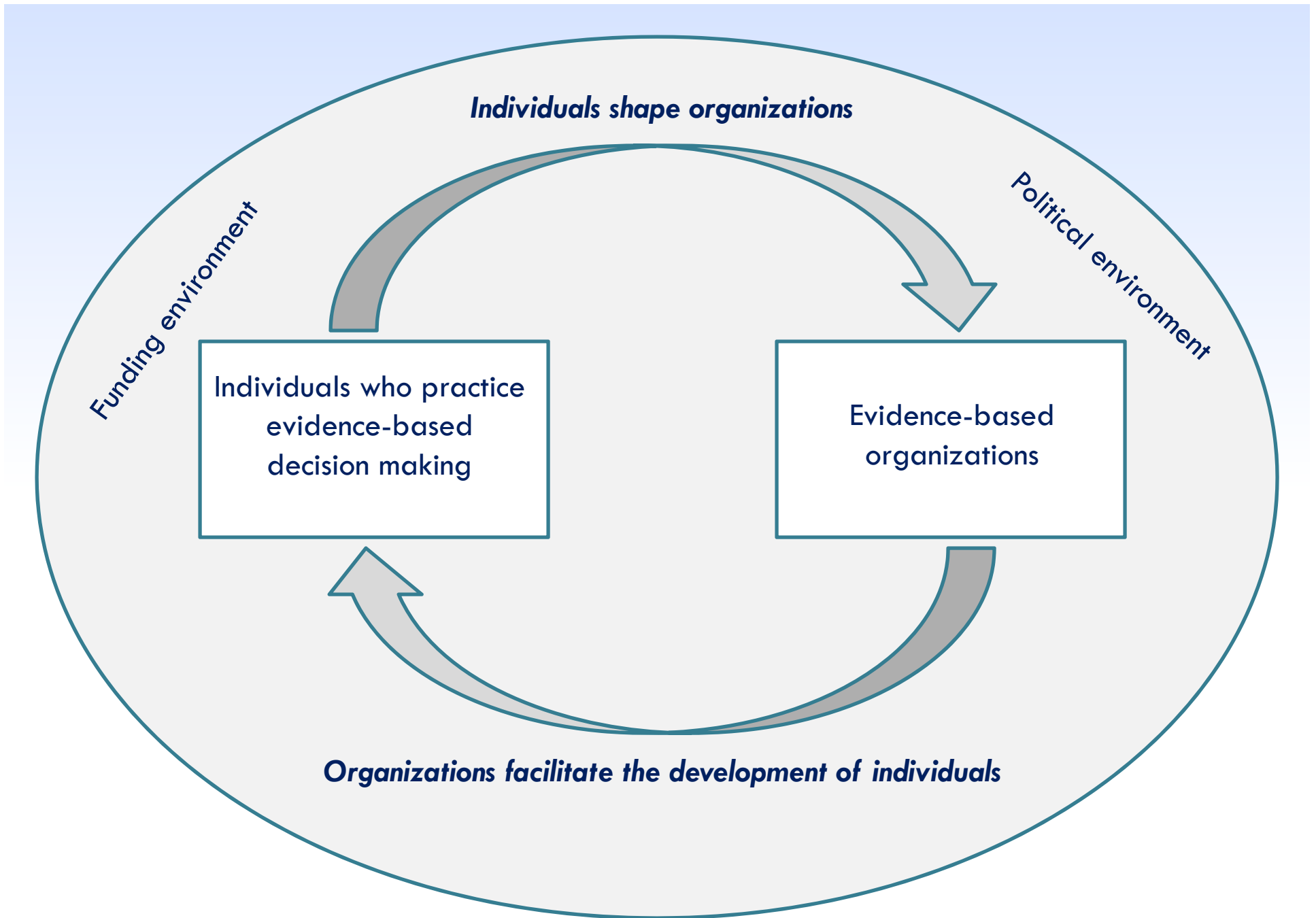
2. Fix the broken pipes

Revisit metrics of impact in academia

- Need to understand the “push” vs. “pull” mismatch (including our choice of study topics)



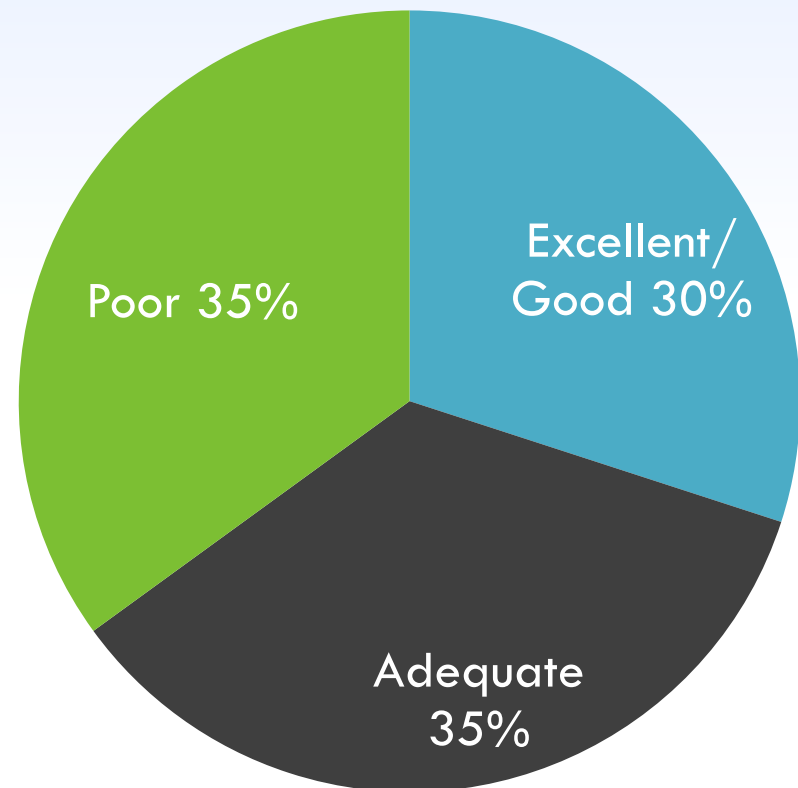
“Yes, a trival observation, but fodder for at least five papers.”



Design for dissemination (D4D)

Survey question:

- Overall, how do you rate your efforts to disseminate your research findings to non-research audiences?



Predictors of excellent dissemination

- Important for their department
 - OR=2.3; 95% CI=1.2-4.5
- Expected by funder
 - OR=2.1; 95% CI=1.3-3.2
- Worked in policy/practice setting
 - OR=4.4; 95% CI=2.1-9.3
- NIH least effective among settings

Tabak RG, et al. What predicts dissemination efforts among public health researchers in the United States? *Public Health Rep.* Jul-Aug 2014;129(4):361-368

3. Level the playing field

Multi-level, policy challenges

- “Upstream” causes that are multilevel, interrelated and closely linked with social determinants (health equity)
- New skills are needed: advocacy, systems thinking, new methods of communication, policy analysis

Health equity commitment

- Social justice is underpinning of public health
- Formal commitment/resources for health equity appears to be limited
 - For example, among 537 state PH practitioners
 - Only 2% work primarily on health equity (9% as one of multiple areas)
 - Those in departments with high health equity commitment, 4X more likely to engage regularly with sectors outside of public health

Source: Furtado *et al.* Health departments with a strong commitment to health equity have a more skilled workforce and engage in higher quality, more diverse collaborations (in review).

What to measure (*examples*)

- Education
 - 3rd grade reading proficiency
- Jobs
 - Unemployment rate
- Housing
 - Percent of households that pay over 30% of income for housing
- Justice
 - Incarceration rate

What to do: policy solutions

1. Address social determinants of health through *state and local laws* (minimum wage laws, Medicaid expansion);
2. Public health *department policies and practices* for a workforce that is aware of the historical and structural barriers to achieving equity;
3. Departmental commitment of *resources* to carry out plans;
4. Departmental *capacity building* to facilitate the skill sets needed to advance health equity (e.g., cross-sectoral collaboration, community engagement);
5. Departmental *strategic plans and mission, vision, and value statements* that codify and publicize these commitments and guide public health priorities

4. Make a personal commitment

How might you be an advocate for policies to address chronic diseases and health promotion?

Think of advocacy as a continuum



Advocacy(early stage)

Activity

- Vote in an upcoming election
- Contribute to policy research/evaluation
- Speak to your family/friends about a policy issue

Advocacy (middle stage)

Activity

- Write a letter to the editor on a policy topic
- Write or call an elected official about a policy issue
- Attend a training to learn how to better advocate using the media
- Work with the media to advocate for or against a policy
- Blog about a policy issue of interest

Advocacy (later stage)

Activity

- Present at a city council meeting
- Meet with a staff person
- Meet with an elected official
- Work with another branch of government/NGO
- Draft legislation on a topic of interest
- Phone an elected official
- Work for an elected official
- Run for elected office

“We must make the healthy choice
the easy choice.”

-- World Health Organization

Together, we can help make sure
that every family that walks into a
restaurant can make an easy,
healthy choice.

— Michelle Obama —

Thanks!!

