

Focus on Eye Health Summit:  
Our Changing Vision

# Keynote Speaker



## The Role of Public Health in Advancing Eye Health

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# ***The role of public health in advancing eye health***



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# Objectives for today

1. Describe public health and why it matters.
2. Describe the role of public health in promoting eye health.
3. Identify better ways to connect science with practice and policy to promote eye health (both Big P and small p changes).

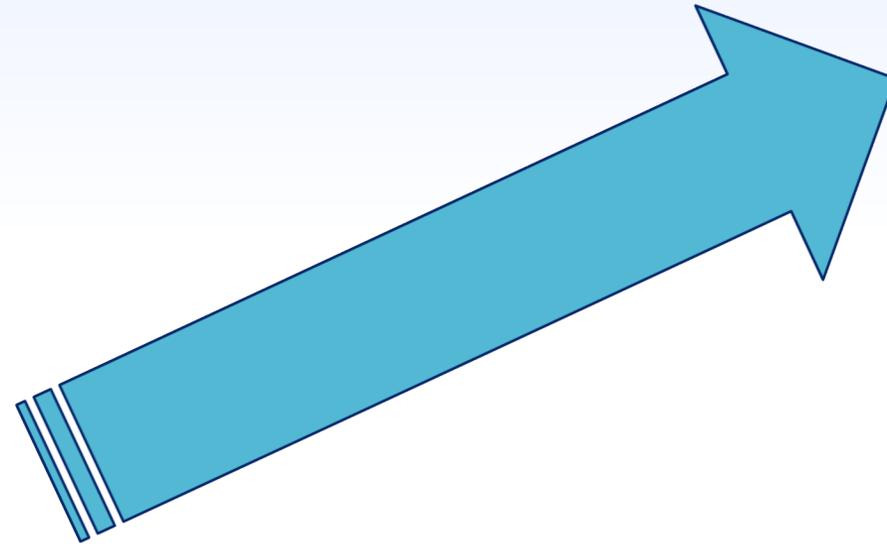
Public health is the science and art of preventing disease prolonging life, and promoting physical health and efficiency

(would add health equity, mental health)

# A few important patterns and trends

# People are living (much) longer

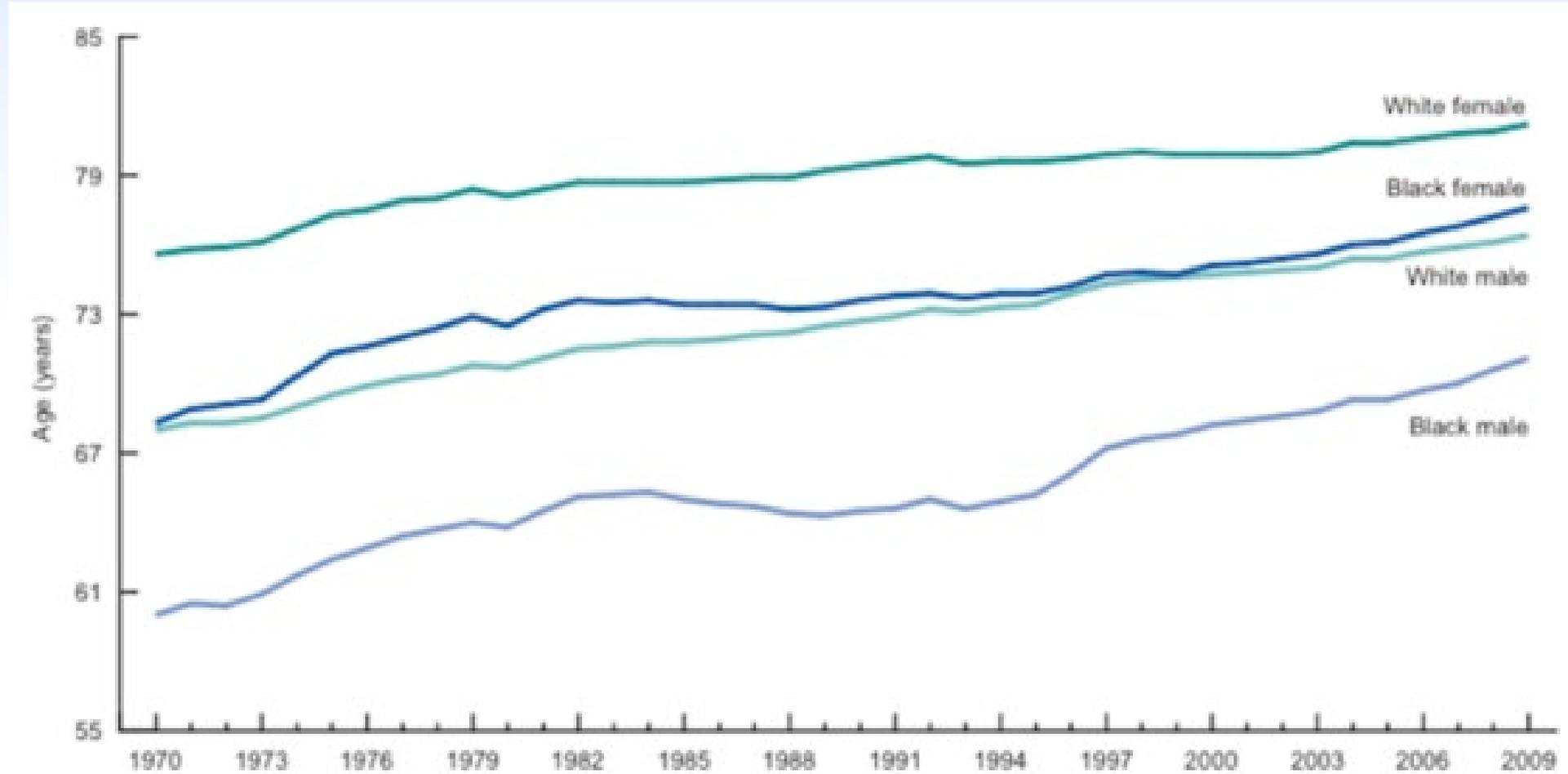
In 1900,  
47 years



In 2018,  
79 years

Remarkable progress!!

# Trends in life expectancy by race and gender 1970-2009



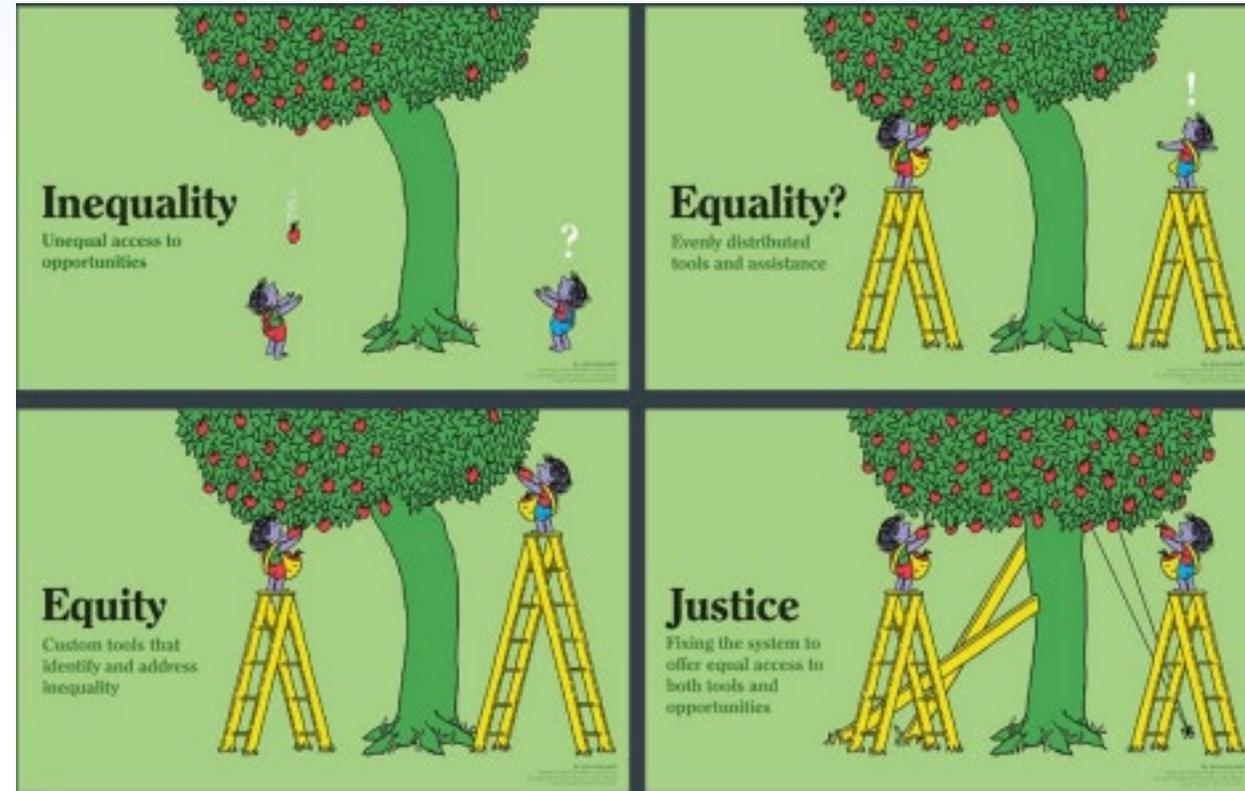
# Top 10 public health achievements

- 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

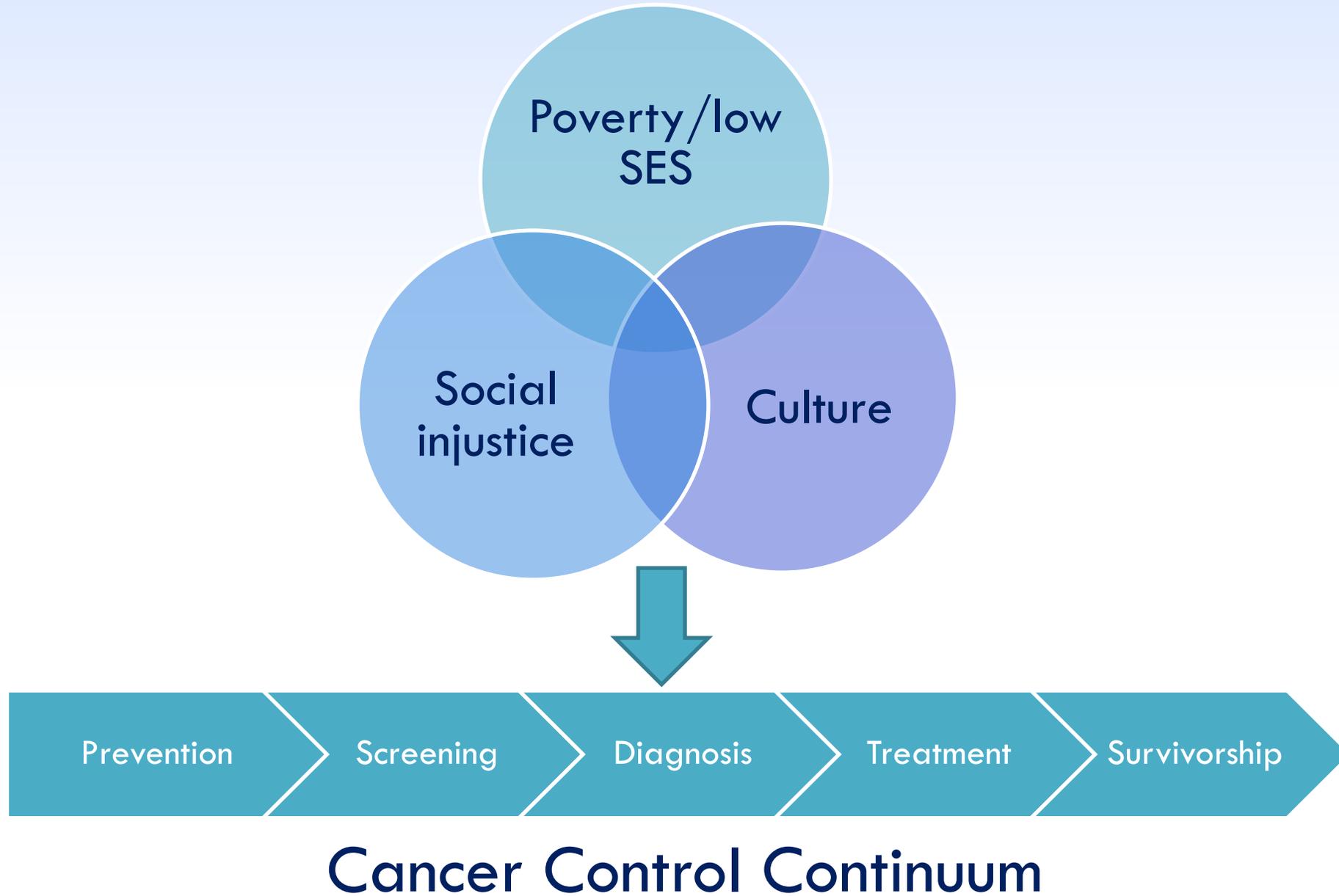
No one is denied the possibility to be healthy for belonging to a group that has been/is economically/socially disadvantaged

# Health Equity

The intersection of social justice and public health



# Social determinants largely define health

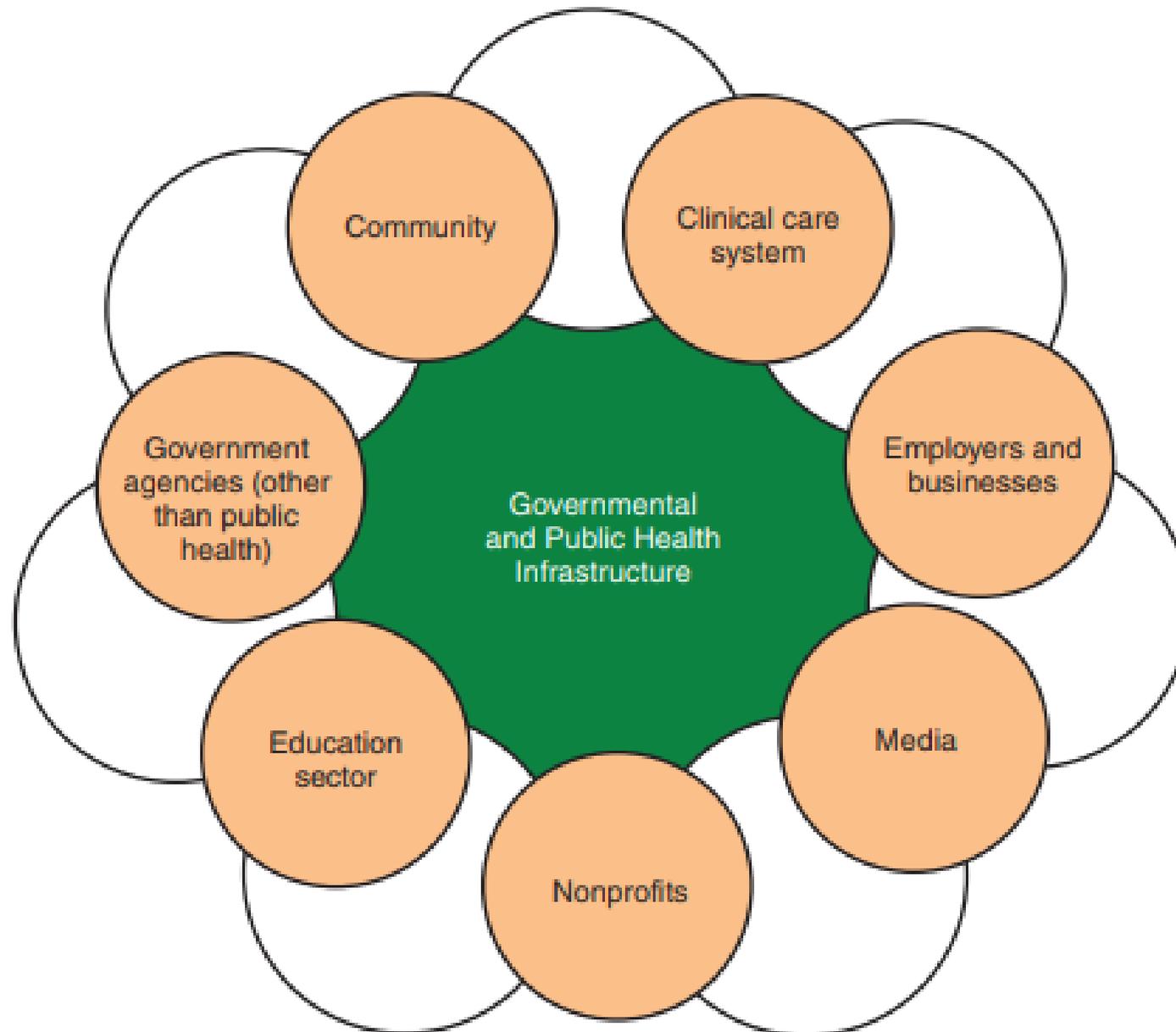


What pressing issues related to social determinants and eye health have been uncovered during the COVID pandemic?

# Spotlight on COVID-19, chronic disease prevention, eye health, and health equity

- Pandemics thrive on inequity
  - Substantially higher mortality among those living in poverty and in some racial and minority groups
- Effects of COVID-19 greatly exacerbated among individuals with existing chronic diseases
  - Importance of chronic disease prevention/co-morbidities
    - COVID → diabetes → sight impairment
- Intersections with social determinants of health across many sectors of society

# The population health system



# The role of public health in eye health

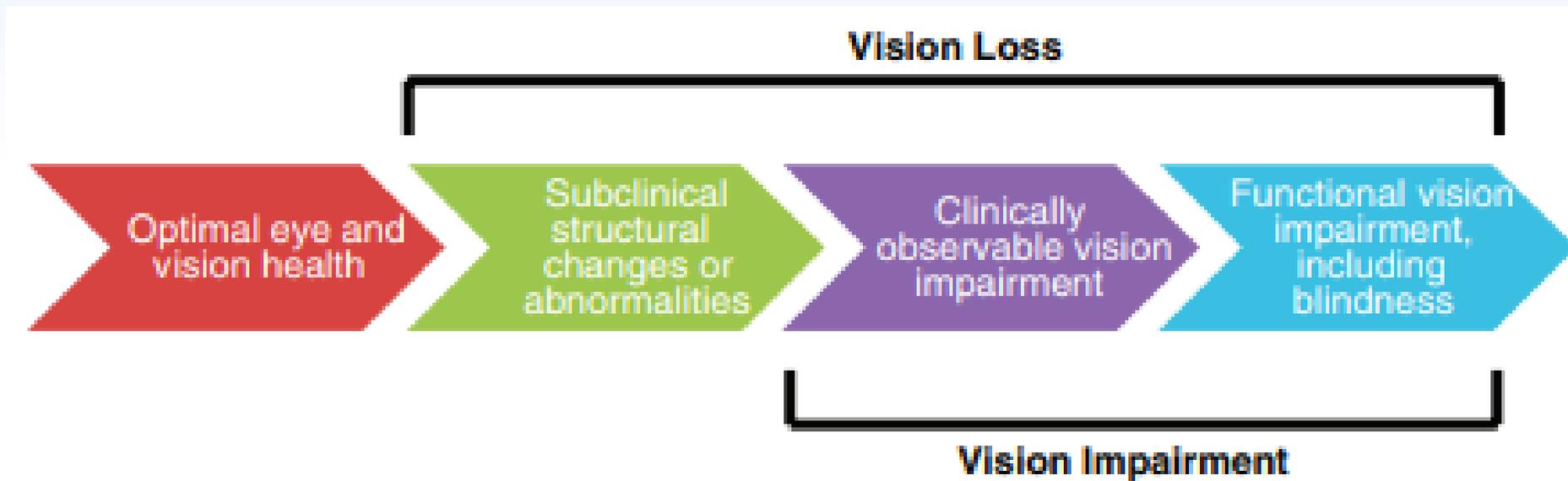
# Levels of prevention

Primary: prevent onset of disease,  
occurrence of injury or impairment

Secondary: early detection, mitigation of  
effect

Tertiary: reduce effect/disability,  
rehabilitation

# Continuum of eye and vision health



# Public health needs 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...***

# Foundations of public health action

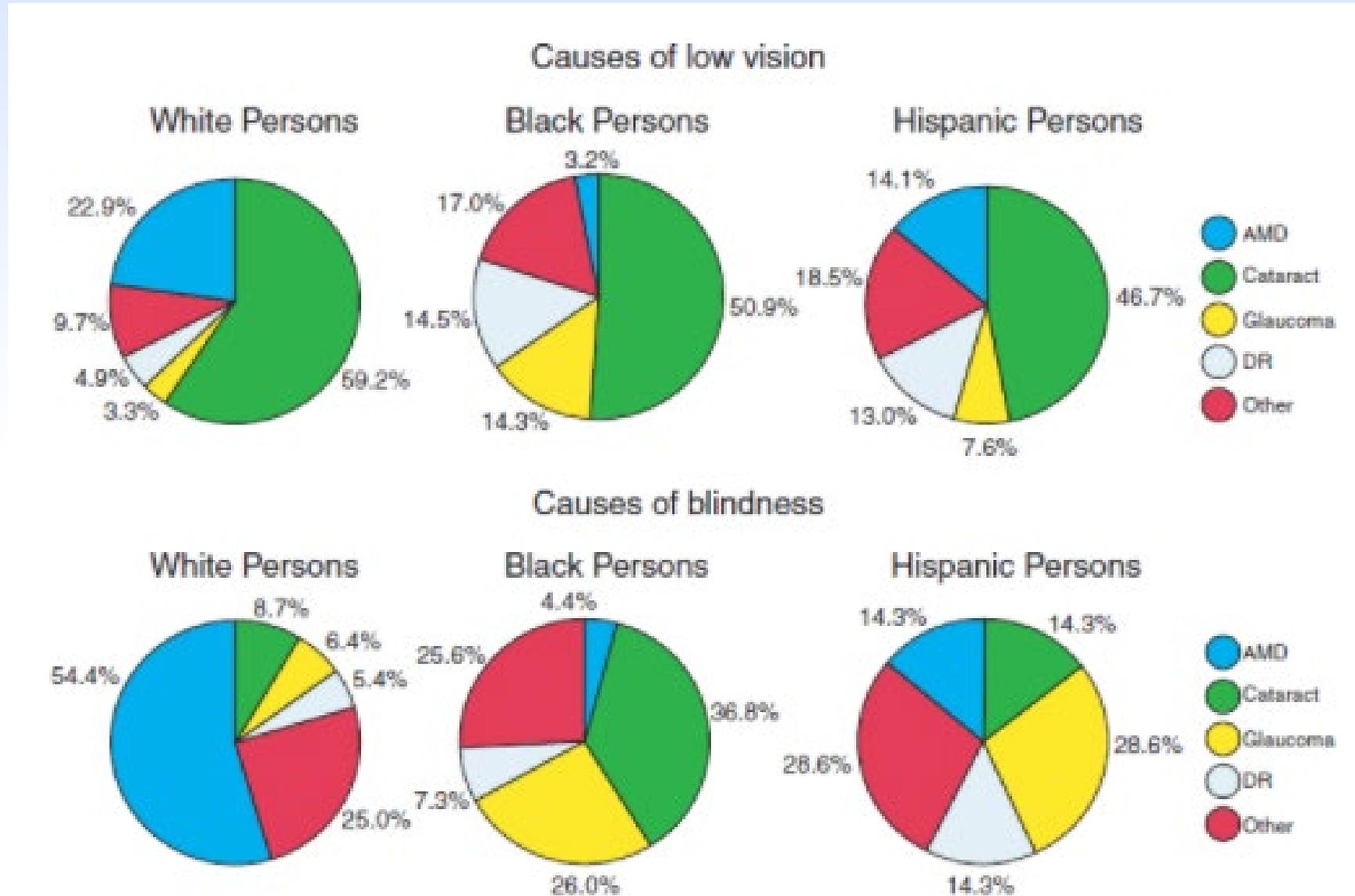
Built on a variety of types of evidence

1. Burden and causes
2. Interventions (policies and practices, both Big P and small p)
3. Scale up and sustainment

“If you build it...”



# Causes of vision impairment by race/ethnicity in the United States



# Public health interventions for eye health (*examples*)

- Altering the built/physical environment (e.g., removing barriers to mobility)
- Directly regulating and monitoring (e.g., requiring eye protections and reporting for sports-related activities and safer work environments)
- Assuring access to clinical services, especially for undiagnosed and low-income populations at risk of eye disease

# Consider multiple types of policy

- Formal laws, codes, regulations (Big P)
  - ACA
  - Clean air policy (indoor or outdoor)
- 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

# Program Sustainability Framework



<https://sustaintool.org/>

# Sample Program Sustainability Report

01/23/2014

> [Go to Next Steps](#)

Many factors can affect sustainability, such as financial and political climates, organizational characteristics, and elements of evaluation and communication. The Program Sustainability Assessment Tool allows stakeholders to rate their programs on the extent to which they have processes and structures in place that will increase the likelihood of sustainability. Assessment results can then be used to identify next steps in building program capacity for sustainability in order to position efforts for long term success.

## Interpreting the Results:

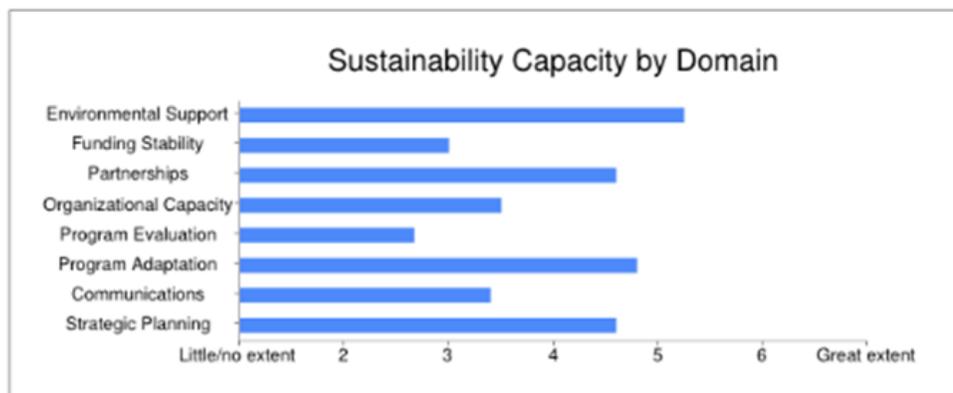
The table presents the average rating for each sustainability domain based on the responses that you provided. The remainder of the document presents the ratings for indicators within each domain. There is no minimum rating that guarantees the sustainability of your program. However, lower ratings do indicate opportunities for improvement that you may want to focus on when developing a plan for sustainability.

## Next Steps:

- These results can be used to guide sustainability planning for your efforts.
- Areas with lower ratings indicate that there is room for improvement.
- Address domains that are most modifiable, quicker to change, and have data available to support the needed changes.
- Develop strategies to tackle the domains that may be more difficult to modify.
- Make plans to assess the sustainability of your efforts on an ongoing basis to monitor changes as you strive for an ongoing impact.

Overall Capacity for Sustainability	4.0
Environmental Support	5.3
Funding Stability	3.0
Partnerships	4.6
Organizational Capacity	3.5
Program Evaluation	2.7
Program Adaptation	4.8
Communications	3.4
Strategic Planning	4.6

1 = to little or no extent / 7 = to a great extent



# *Some Remedies*

Public health practice and policy

**1. What gets measured gets done**

# Surveillance:

Grounded in descriptive epidemiology

Evaluating *variations* in the frequency of disease allows us to ...

- Identify high risk populations
- Prioritize public health resources
- Generate hypotheses about disease causation

# Eye health surveillance

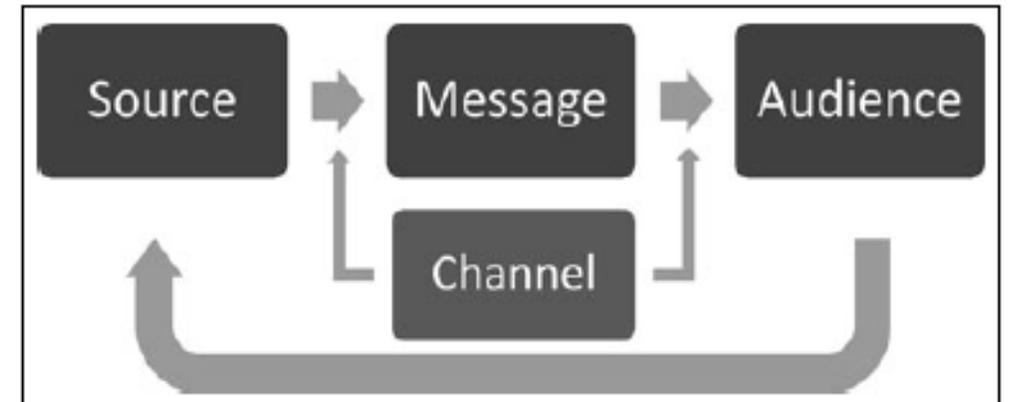
- Tracking burden, disparities, opportunities
  - Modules on the CDC Behavioral Risk Factor Surveillance System
    - Self-reported prevalence of eye disease
    - Access and utilization of eye care services
- Data for ongoing evaluation of eye health initiatives

# What else to measure (*examples*)

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

## 2. Make better sausage

# Better connect the message and the audience



**FIGURE** Model for Dissemination of Research

# Dissemination preferences

- One size does *NOT* fit all
  - 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
    - Democrats trust university sources more than Republicans
    - All groups care about costs and cost-effectiveness

# Policy Briefs

# The 3 - 30 – 3 rule

## *Children's Life Expectancy Being Cut Short by Obesity*

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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 materials

# LOOKING AHEAD

## Improving Our Vision for the Future

VISION & EYE PROBLEMS ARE INCREASING AS AMERICA AGES

**90**  
MILLION

Americans over 40 have vision and eye problems

That's more than  
**3 in 5**



By 2050, without effective interventions:



Diabetic retinopathy ↑72%



Cataracts ↑87%



Glaucoma ↑100%



Age-related macular degeneration ↑100%



Vision impairment & blindness ↑150%



**COST OF VISION PROBLEMS**

↑157% TO \$373 BILLION

### 3. Level the playing field

# Multi-level, policy challenges

- “Upstream” causes that are multilevel, interrelated and closely linked with social determinants (health equity)
- Crossing sectors that may not have an obvious connection to health
- 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 public health 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

## 4. Make a personal commitment

How might you be an advocate for policies to address eye health?



# Think of advocacy as a continuum



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

**-- World Health Organization**

Thanks!!  
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# Prevent Blindness

Focus on Eye Health  
National Summit



**Our Changing Vision**