

Perspectives on Health Equity and Transportation: *Equality ≠ Equity*

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Equality



Equity



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Health Disparities

- Disparities “....the differences in the incidence, prevalence, mortality, and burden of diseases and other adverse health conditions that exist among specific population groups in the United States.”

Trend in Life Expectancy by Race and Gender

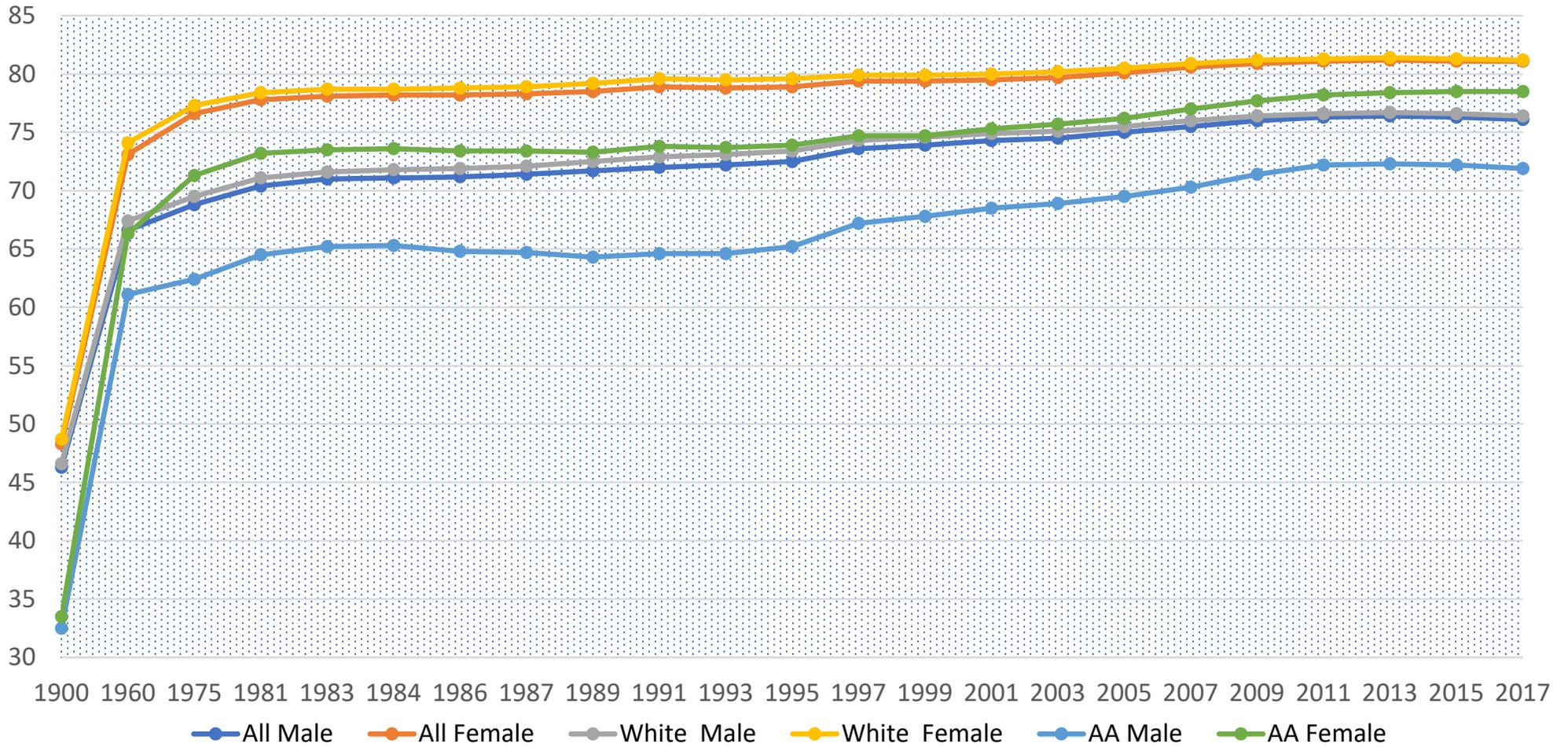
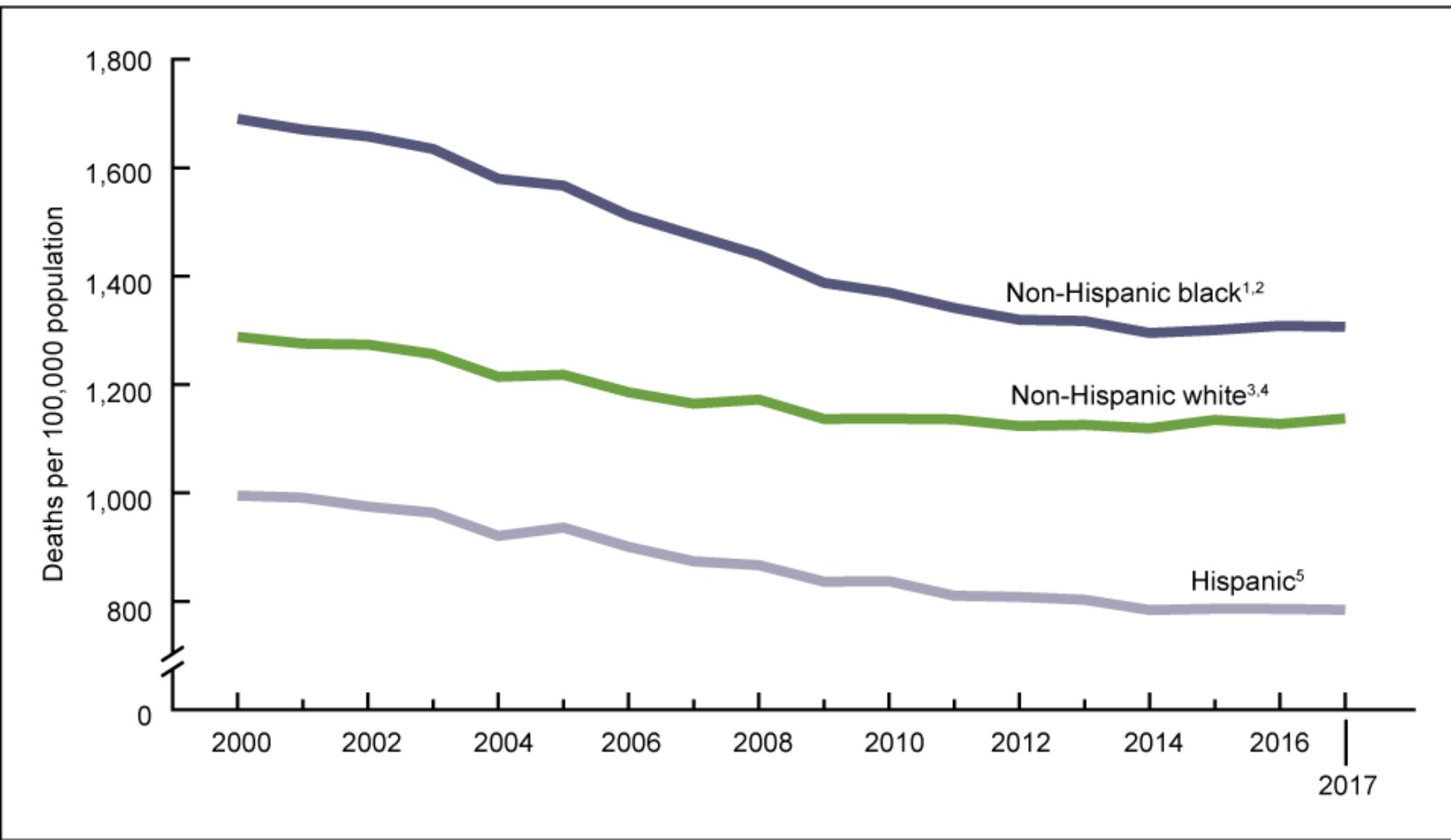


Figure 1. Age-adjusted death rates for persons aged 25 and over, by Hispanic origin and race: United States, 2000–2017



¹Significant decreasing trend for 2000–2012 with different rates of change over time; stable trend for 2012–2017; $p < 0.05$.

²Rate significantly higher than the rate for non-Hispanic white and Hispanic persons, $p < 0.05$.

³Significant decreasing trend for 2000–2011; stable trend for 2011–2017, $p < 0.05$.

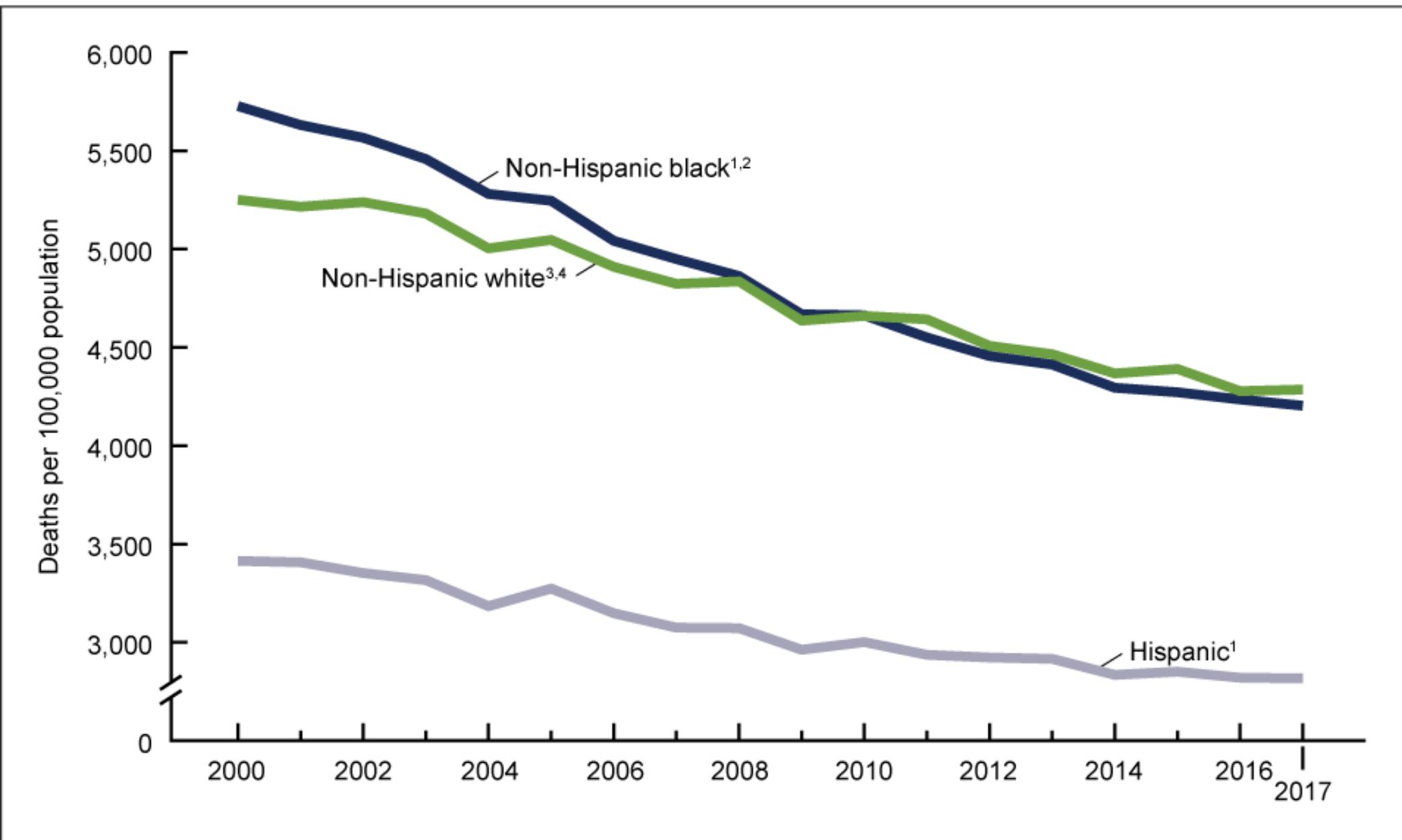
⁴Rate significantly higher than the rate for Hispanic persons, $p < 0.05$.

⁵Significant decreasing trend for 2000–2017 with different rates of change over time; $p < 0.05$.

NOTE: Access data table for Figure 1 at: https://www.cdc.gov/nchs/data/databriefs/db342_tables-508.pdf#1.

SOURCE: NCHS, National Vital Statistics System, Mortality.

Figure 4. Age-specific death rates for persons aged 65 and over, by Hispanic origin and race: United States, 2000–2017



¹Significant decreasing trend for 2000–2017 with different rates of change over time; $p < 0.05$.

²Rate significantly higher than the rate for non-Hispanic white persons from 2000 through 2009 and higher than Hispanic persons from 2000 through 2017, $p < 0.05$.

³Significant decreasing trend for 2000–2017, $p < 0.05$.

⁴Rate significantly higher than for non-Hispanic black persons for 2011 to 2017 and higher than Hispanic persons for 2000 to 2017, $p < 0.05$.

NOTE: Access data table for Figure 4 at: https://www.cdc.gov/nchs/data/databriefs/db342_tables-508.pdf#4.

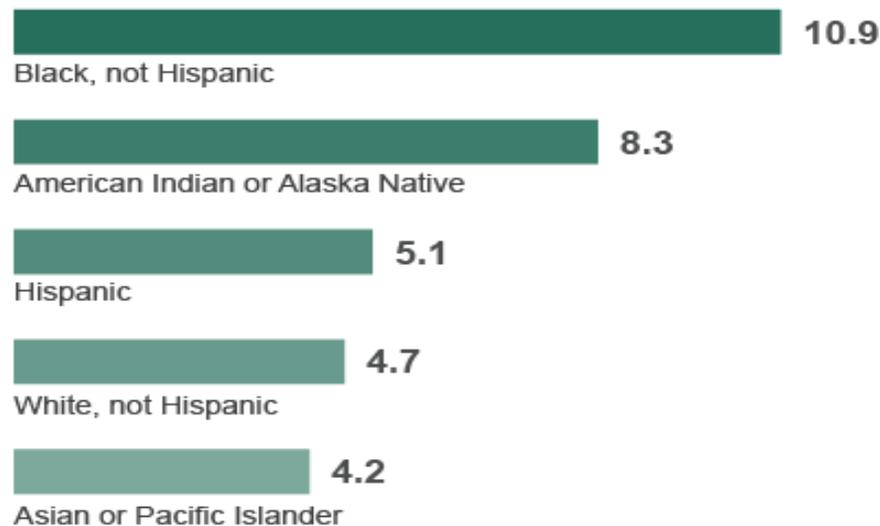
SOURCE: NCHS, National Vital Statistics System, Mortality.

Maternal, Infant, and Child Health

Infant Mortality Rate by Race and Ethnicity of Mother, 2017

The infant mortality rate experienced by infants born to non-Hispanic black mothers was **more than 2.5 times** the rate experienced by infants born to Asian or Pacific Islander mothers (10.9 versus 4.2 deaths under 1 year of age per 1,000 live births, respectively).

Infant deaths per 1,000 live births



Data source: Linked Birth/Infant Death Data Set, CDC/NCHS.

Healthy People 2020 Targets

Infant Deaths

5.8 infant deaths per 1,000 live births occurred within the first year of life in 2017.

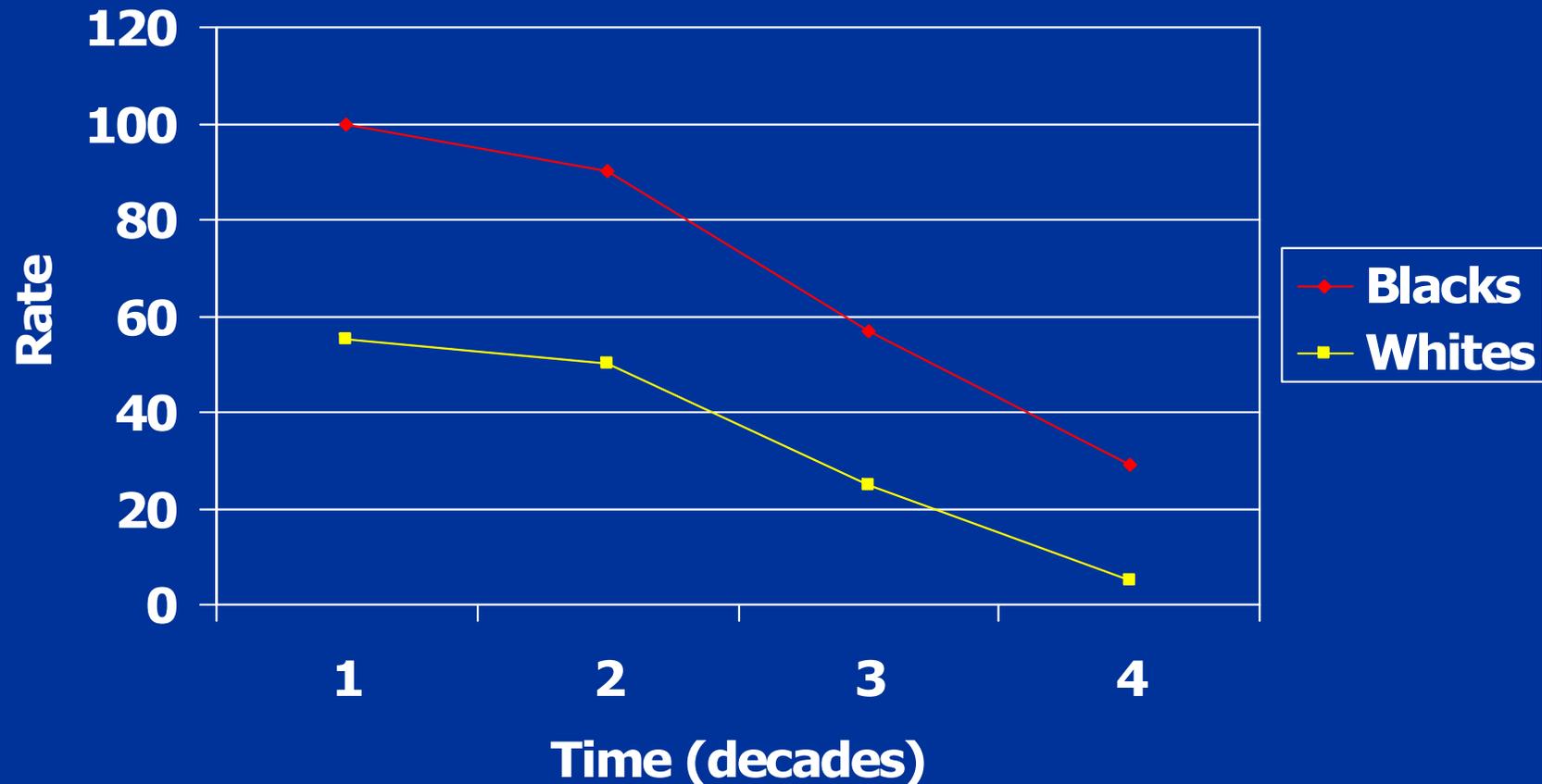
Data source: Linked Birth/Infant Death Data Set, CDC/NCHS.



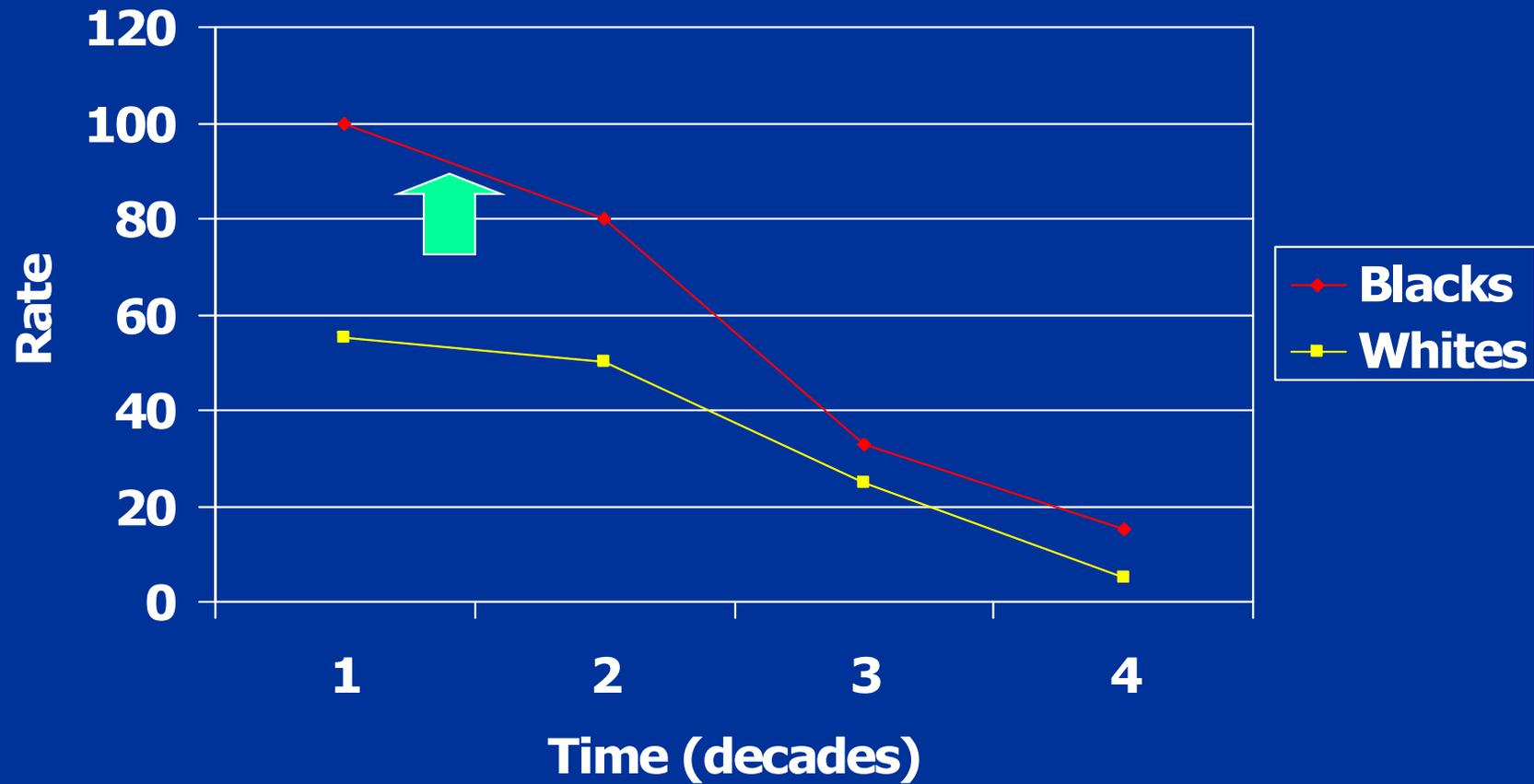
Why Study Health Disparities?

- Pose moral and ethical issues for service providers in a rapidly changing health or service system (e.g., where decision result in inequitable distribution)
- Pose dilemma for a society that is still wrestling with a legacy of discrimination and racism
- Health and healthcare as resource tied to social justice, opportunities, and the quality of life of individuals and groups (facilitating the advancement of persons economically and professionally)
- Raises concerns for the overall health (and quality of healthcare) of the US
- Hampers or encourages efforts to improve the nation's health
- Identifies opportunities for appropriate interventions, particularly among groups at greatest needs

Reducing the Racial/Ethnic Disparities: Framework?



Hypothetical Framework



When Racial/Ethnic Disparities are Minimized or Reduced

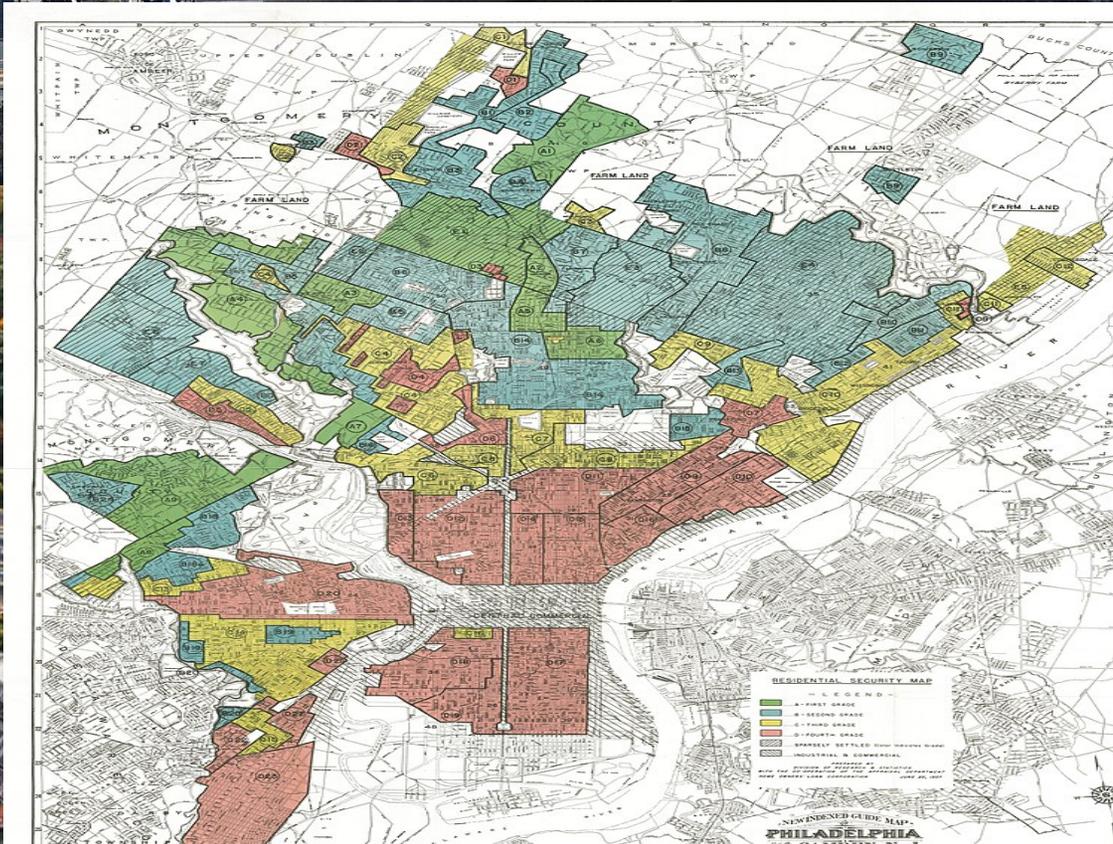
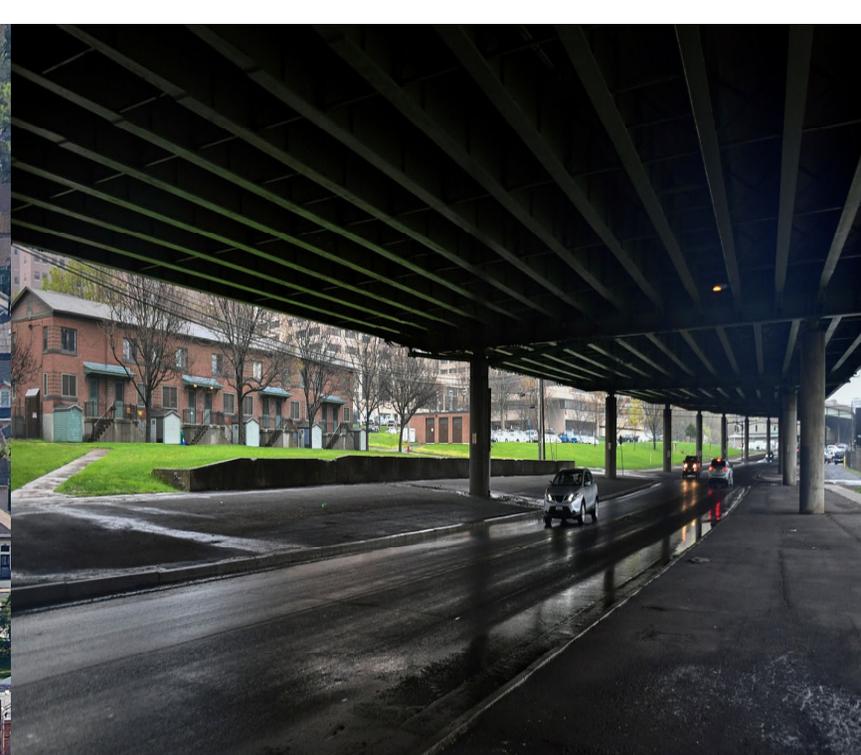
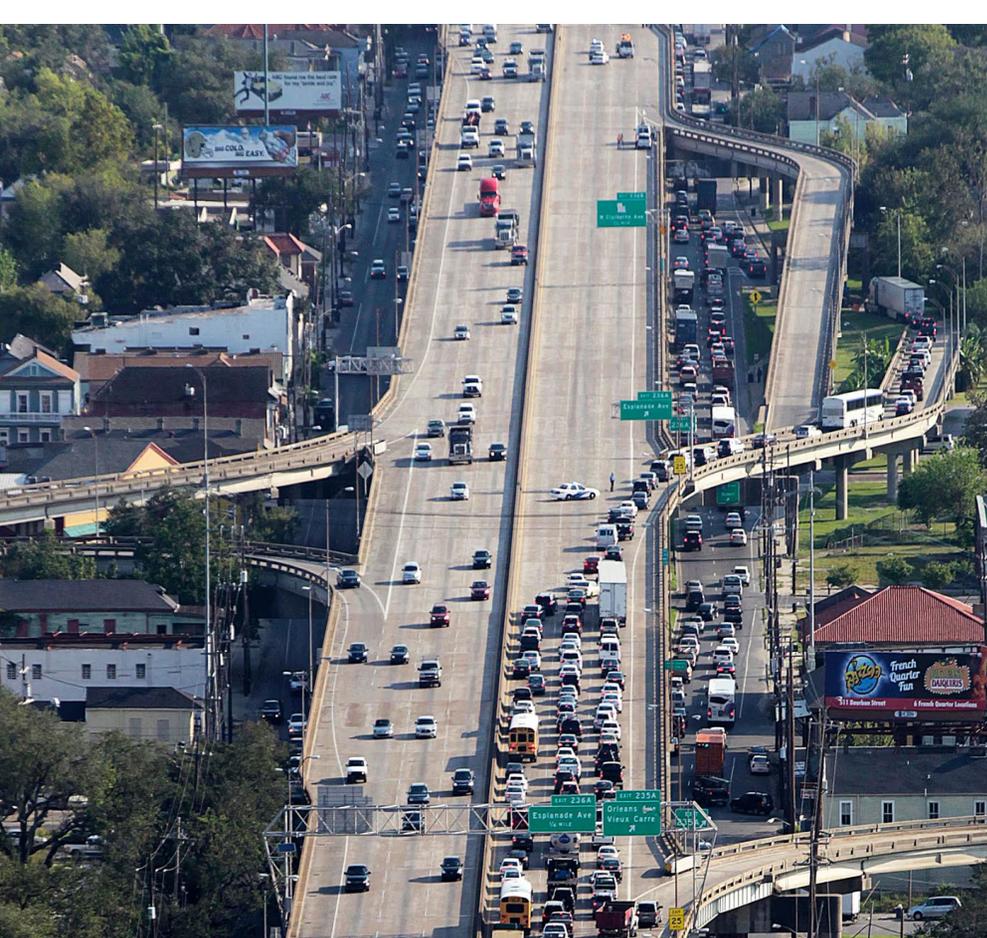
- Through evidence-based and team-based efforts to improve health for all.
- When community is well engaged, often as leaders.
- When efforts to improve conditions are less costly or high tech.
- When “change” is expected and governmentally sponsored.
- In “equally” accessible systems.

Place - Community



Place - Community - Context





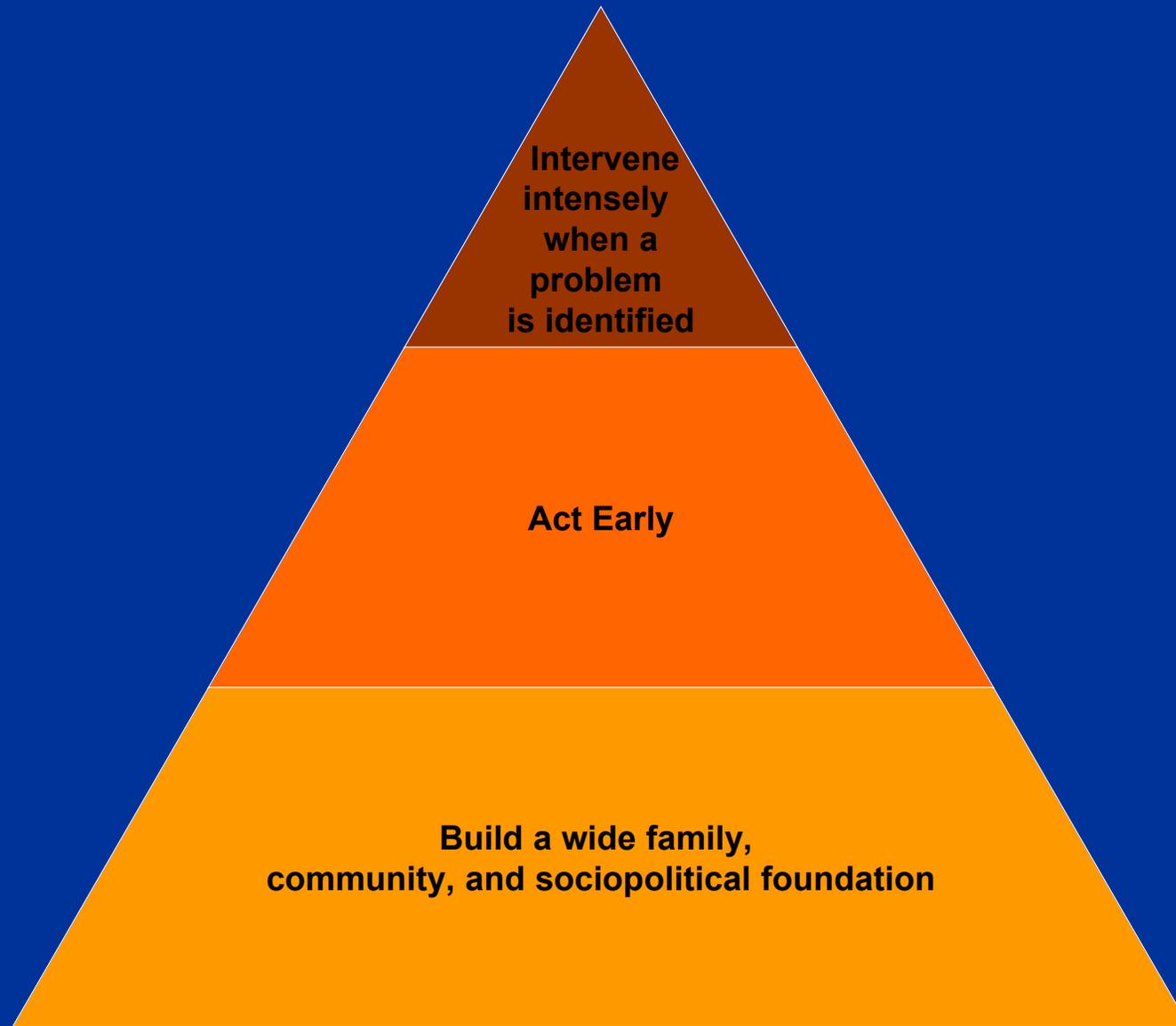
Community Matters

- Evidence that alcohol and tobacco companies target racial/ethnic communities (Mayberry RM, Price, PA, 1993)
- In racial/ethnic diverse communities the disparity gap in risk factors prevalence are minimal.
- When African Americans and whites live in similar risk environments, their health outcomes are more similar (LaVeist et al. 2009).

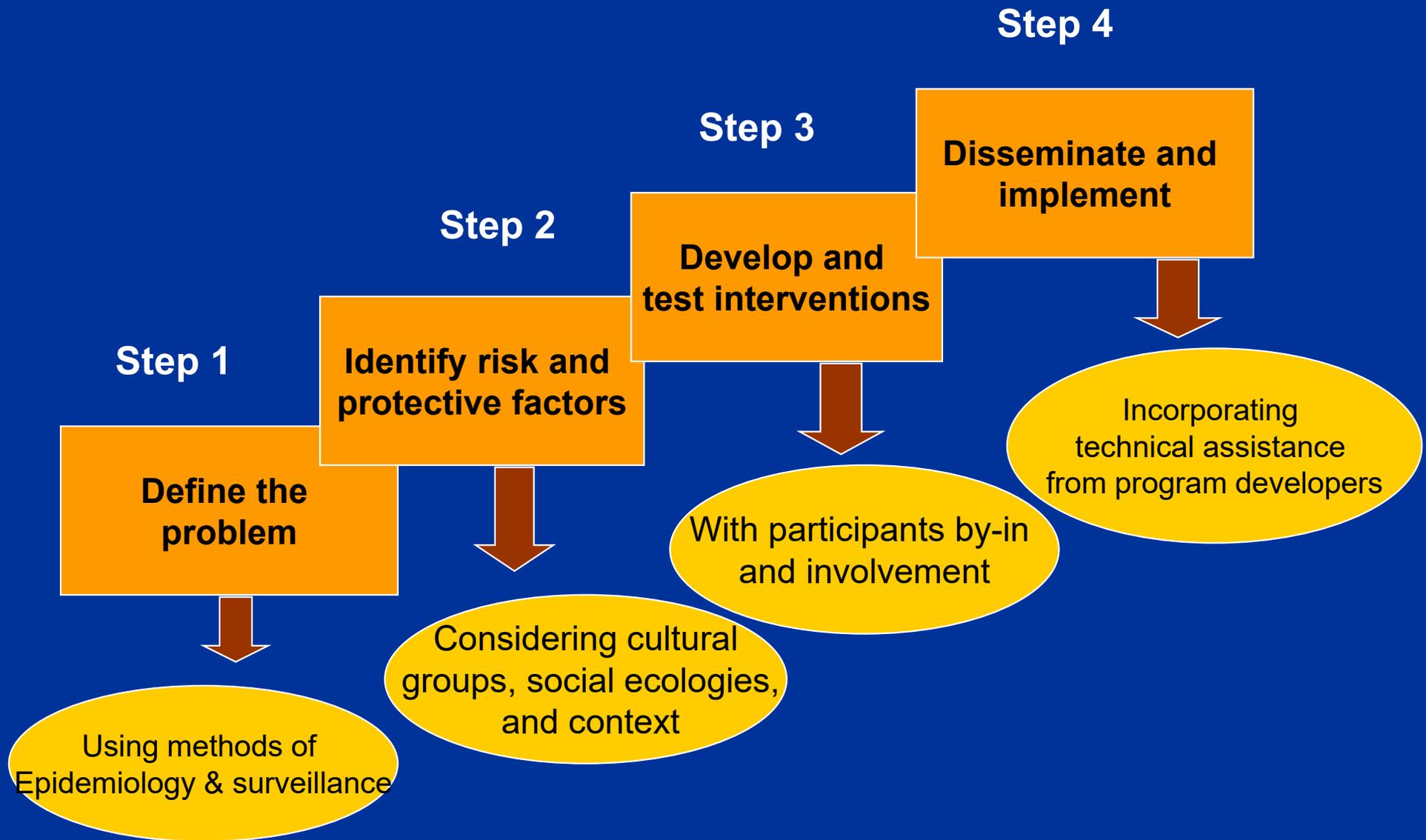
Community Engagement Approach

- ...address the population at risk as well as the community in which they reside.
- ...mobilize and empower informed community residents and organizations to create “change from within” and among those most affected.

A Three-Level Approach to Promoting Community Health



Modified Public Health Model



What is the Objective?

- ...reduce racial/ethnic disparities.
- ...improve access and quality of services.
- ...improve health status.
- ...insure fairness and justice.

Advancing Health Equity

- Frame the issue(s)
- Identify the intervention opportunity
- Specify the objective(s)
- Justify the approach
- Implement the appropriate intervention(s) appropriately

Vehicle emissions and other transportation-related **Exposures** >>>>
Outcomes: respiratory, neurological, cardiovascular, reproductive and immune system damages; mobility, social connectivity, independence, physical activity, pedestrian injuries, noise and community severance/devastation/under-development

What Does Health Equity Look Like?

