



HEALTHY
COMMUNITY
DESIGN

Public Health Tools: Diarrhea and Death – now Livability?

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Rail~volution
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National Center for Environmental Health
Healthy Community Design Initiative



What is Health?

- **Health is the state of complete physical, mental and social well-being and not merely the absence of disease or infirmity - World Health Organization**





Billboard advertisement featuring two panels: the left panel shows a person working on a roof, and the right panel shows a close-up of a guitar. Below the panels, there is a line of text: "We understand you're looking for a new roof, and we're here to help."

TO
285
↓

Liquor





Healthy Community Design Initiative: Mission

*To understand and improve the
relationship between community design
and health*



Community Design and Health

Core Components of Community Design

Transportation Systems

Land Use

Housing

Parks/Rec

Environmental and Behavioral Impacts

Air Quality

Water Quality/Quantity

Access to Greenspace

Destination and Transportation Options

Physical Activity

Nutrition/Food Access

Related Leading Causes of Death - Children

Unintentional Injuries

Cancer

Related Leading Causes of Death - Adults

Heart Disease

Cancer

Cerebrovascular Disease (Stroke)

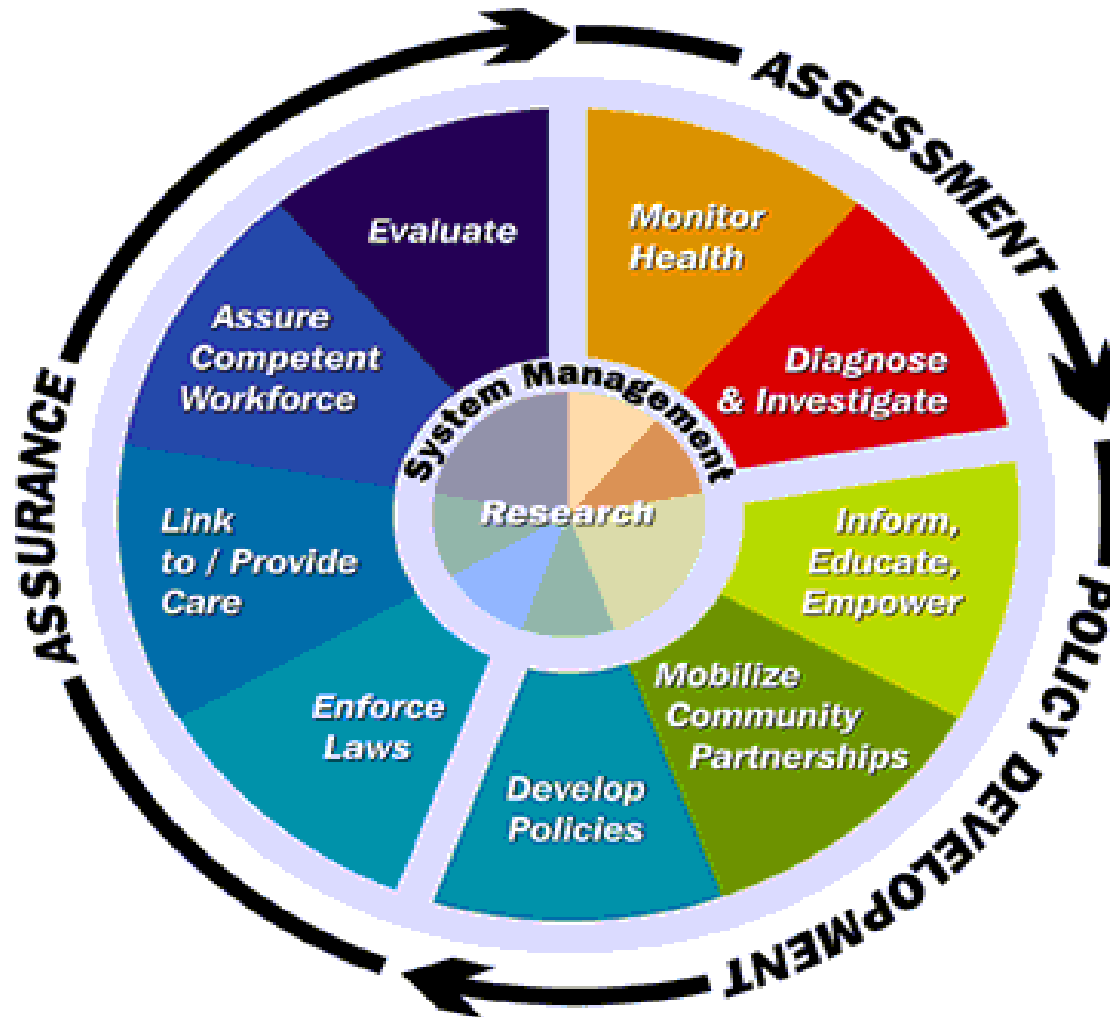
Unintentional Injuries

Diabetes

Public Health Importance

- ❑ **Annual costs of transportation-related health outcomes (APHA 2010)**
 - Obesity and overweight: \$142B
 - Air pollution from traffic: \$50-80B
 - Traffic crashes: \$180B

The 10 Essential Public Health Services



Monitoring Health: Surveillance

- ❑ **Ongoing, systematic collection, analysis, and interpretation of data**
 - **Collect mortality, morbidity information**
 - **Identify risk factors and define affected population**
- ❑ **Community design surveillance**
 - **Transit, pedestrian, and bicycle injuries**
 - **Trips and mode share**
- ❑ **Importance**
 - **Communication of issues**
 - **Tracking changes**

Surveillance – Community Design Integration

- ❑ **Environmental Public Health Tracking Network**
- ❑ **National surveys**
- ❑ **Benchmarking**
 - www.peoplepoweredmovement.org/site/index.php/site/memberservices/C529


Investigation: Epidemiology

❑ **Study of the distribution and causes of health outcomes in specified populations**

❑ **Observational studies**

- **Cross-sectional**
- **Case-control**
- **Cohort**

❑ **Randomized control trials**



**Increasing
strength of
design**

Examples

- ❑ **Besser, et al. Walking to Public Transit: Steps to Help Meet Physical Activity Recommendations. 2004**
- ❑ **MacDonald, et al. The Effect of Light Rail Transit on Body Mass Index and Physical Activity. 2010**

Linking Community Design to Health

- ❑ **Goal to identify causal relationships**
- ❑ **Challenges**
 - **Creating a defined exposure and outcome**
 - **Minimize or control bias and confounding**
- ❑ **CDC Efforts**
 - **Research**
 - **Systematic reviews summarize evidence**
 - www.thecommunityguide.org
 - **Measurement guidance**
 - www.cdc.gov/mmwr/preview/mmwrhtml/rr5807a1.htm

Policy Development

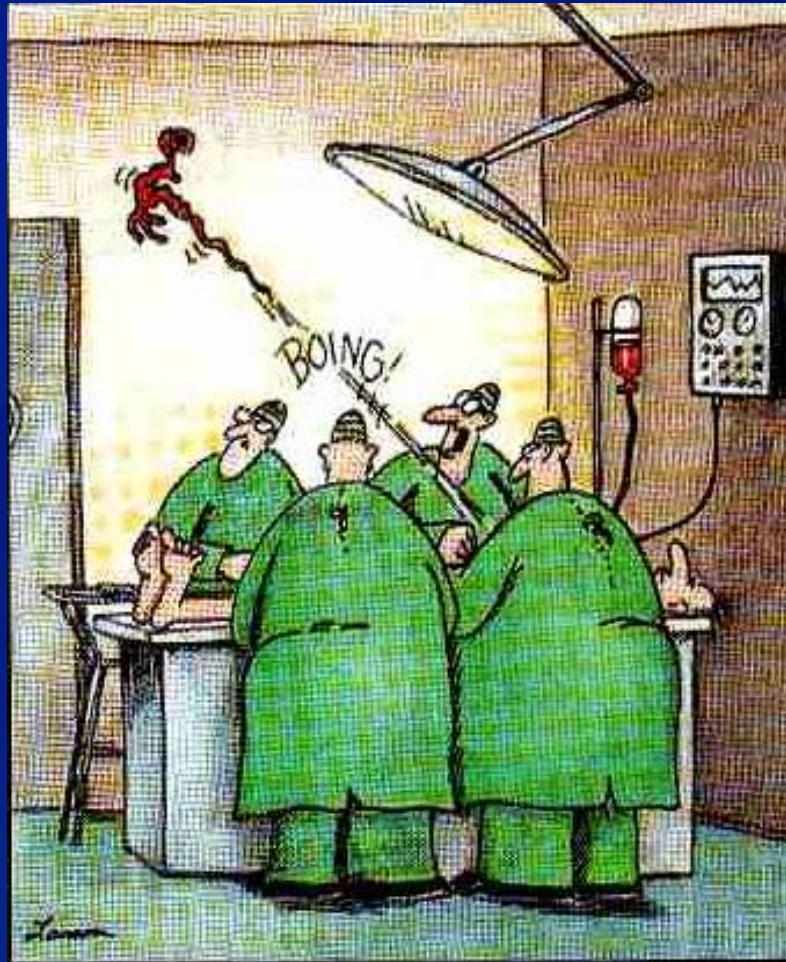
❑ Health Impact Assessment (HIA)

- Collection of procedures and tools by which projects, policies, and programs can be evaluated based on their potential effects on the health of a population, and the distribution of those effects within the population. Gothenburg consensus statement, 1999

❑ Steps

- Screening
- Scoping
- Risk Assessment
- Recommendations
- Reporting
- Evaluation

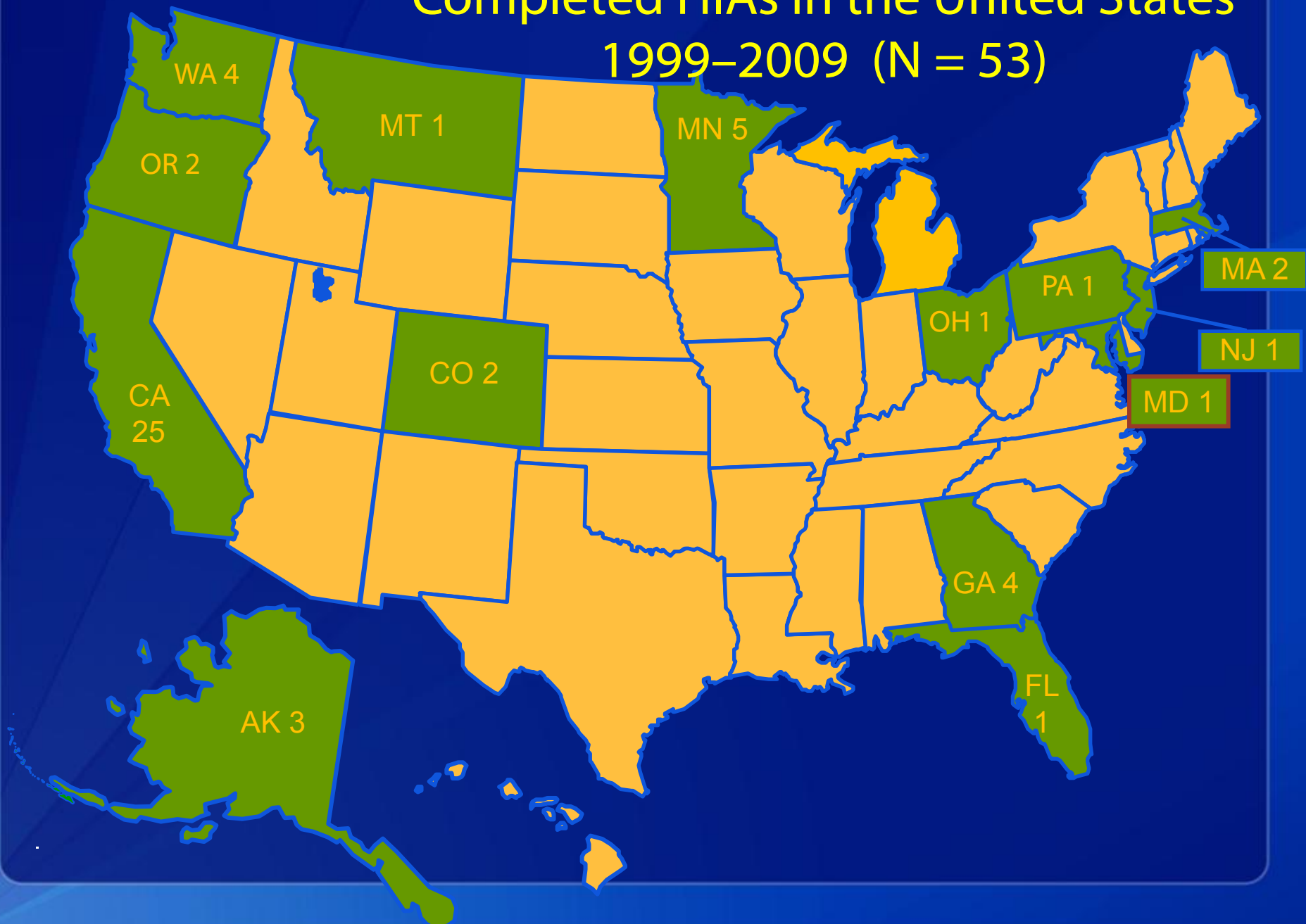
HIA as a Pre-op Physical for Communities



"Whoa! Watch where that thing lands—
we'll probably need it."

<http://www.phoenix5.org/humor/CartoonOperation.html>

Completed HIAs in the United States 1999–2009 (N = 53)



HIA

❑ Efforts

- Tracking HIAs
- Toolkit and education development
- Capacity building grants, training state and local personnel
- Opportunities to conduct HIA within other grants

❑ Challenges

- Need evidence-based decisions, not decision-based evidence
- Standardization of practice could help
- Effective communication of uncertainty
- Engaging decision-makers

Other Policy Development

❑ Transportation Policy Recommendations

- <http://www.cdc.gov/transportation/>
- Expand public transit
- Ensure safe connections to transit
- Promote transit-oriented development

❑ Model legislation

- APA model zoning codes

❑ Importance

- Can set the direction for multiple projects

Assurance: Evaluation

❑ Importance

- Helps communicate internally and externally successes
- Quality improvement

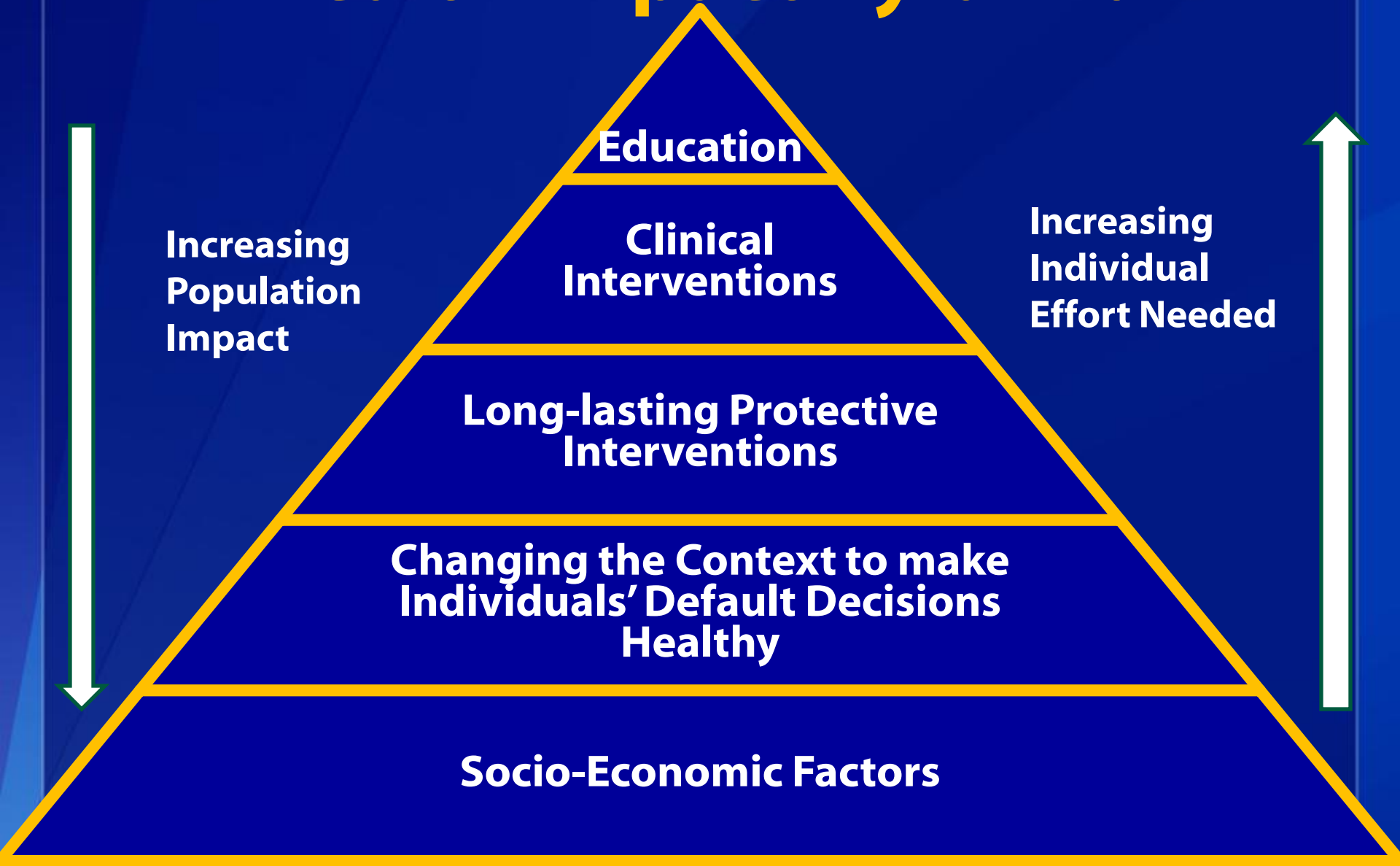
❑ Projects

- Safe Routes to School
- Non-motorized Transportation Pilot Program

❑ Challenges

- Timing
- Measures
- Additional activity

Health Impact Pyramid



What can you do?

□ General

- Build relationships
- Learn how decisions are made
- Adapt what has worked elsewhere

□ Specific

- Use or create surveillance to track progress
- Investigate areas with problems
- Consider policy interventions or HIAs
- Identify opportunities for evaluation

Choices

Will 23 lanes be enough?

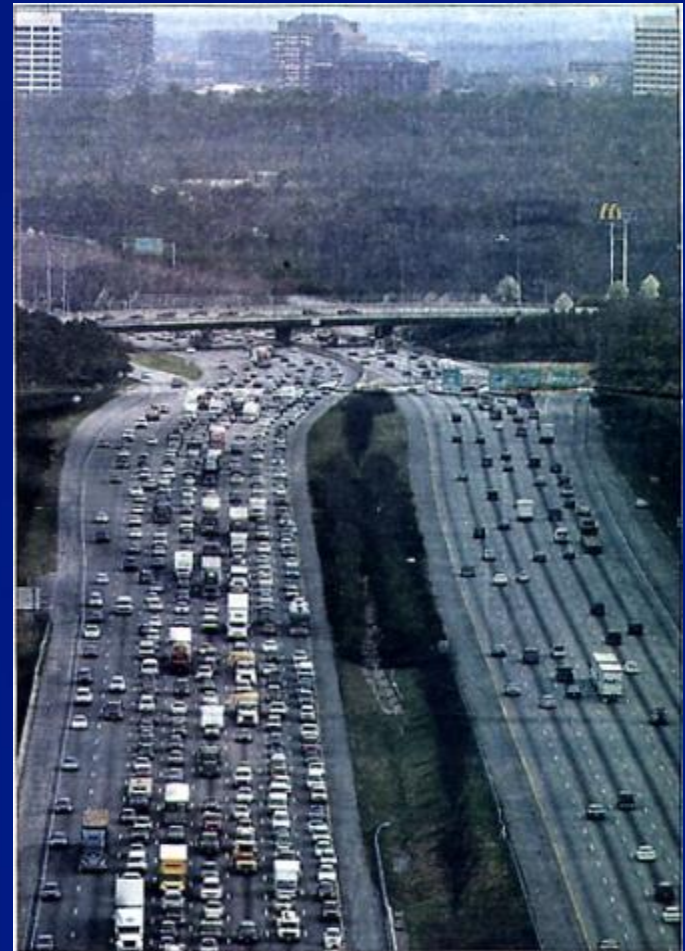
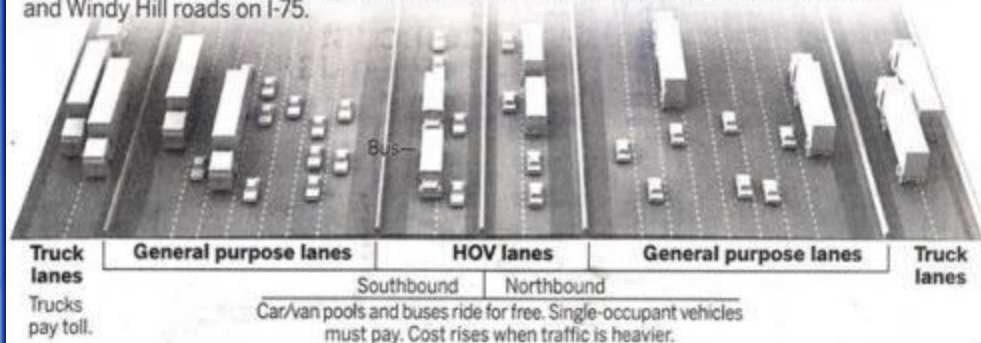
Proposal would put I-75 among country's biggest

By ARIEL HART
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It's wider than an aircraft carrier. Far wider than the carving on Stone Mountain. Wider than the White House stretched end to end, twice.

It's the planned I-75, all 23 lanes, coming soon to Cobb County. As currently conceived it's 388 feet across, wider than a football field is long.

23 LANES: The state Department of Transportation is planning to expand I-75 (below) and I-575 in Cobb and Cherokee counties. The 23-lane stretch would be between Delk and Windy Hill roads on I-75.



Traffic heads north on I-75, just north of I-285, on Thursday. A proposal for the interstate is enough to make a road builder weep with joy, and make others wonder whether it's overkill.

Thank you



The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.