

# Active Transportation and Health: Findings, Recommendations and Next Steps

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- How does transportation influence health
- Public Health recommendations related to active transportation
- CDC programs focused on supporting acting living environments



NUTRITION  
PHYSICAL ACTIVITY  
OBESITY

### Land Use for Cars



Make everything car friendly!



### “National No Walk Campaign”



Adapted from Howard Frumkin, PhD



## Leading Causes of Death

- Heart disease
- Cancer
- Chronic lower respiratory diseases
- Stroke (cerebrovascular diseases)
- Accidents (unintentional injuries)
- Alzheimer's disease
- Diabetes

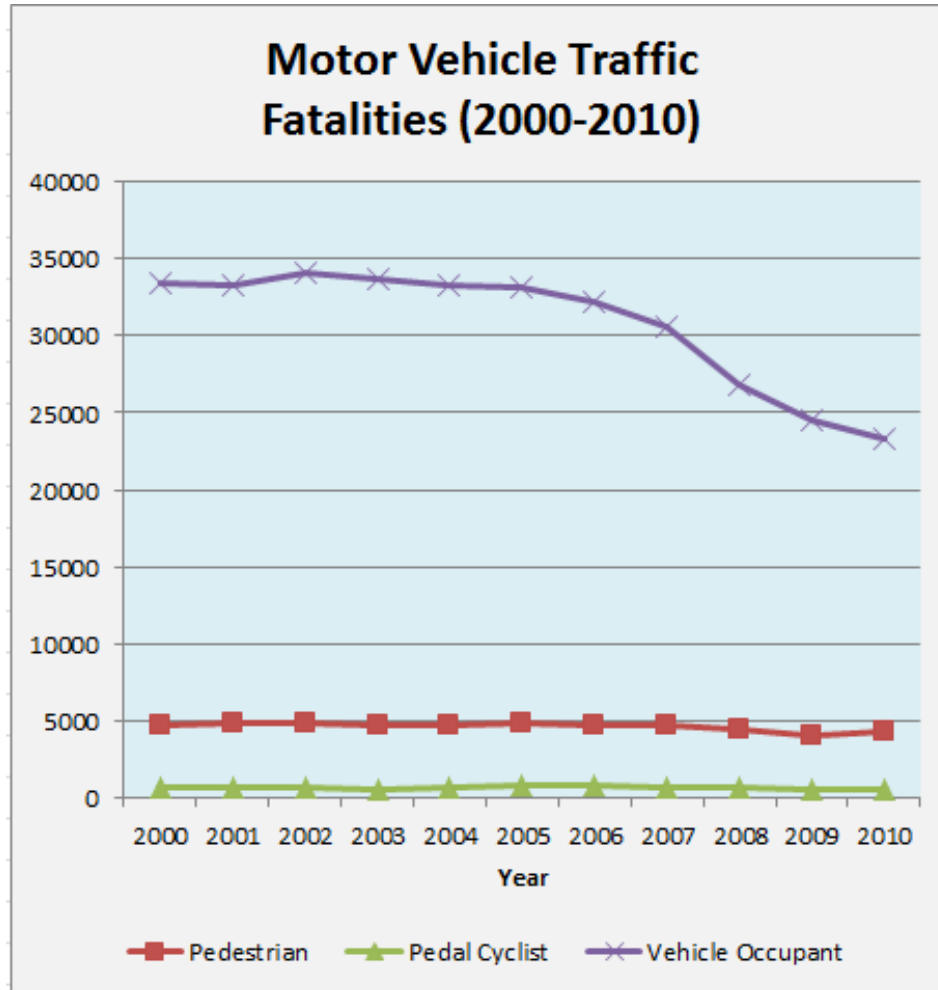
<http://www.cdc.gov/nchs/fastats/lcod.htm>

# Air Pollution

- ❑ **Decreased lung function**
  - COPD
  - Asthma Triggers
  - Increased allergens (e.g. Climate Change)
  - ER Visits and Hospitalizations for Asthma
- ❑ **Cardiovascular Disease**
  - ER and Hospitalization for Acute Cardiac Events ER and Hospitalization for Acute Cardiac Events
- ❑ **Other**
  - Near roadway pollution suggestive of some cancers

1. <http://www.cdc.gov/healthyplaces/healthtopics/airpollution.htm>
2. [http://www.cdc.gov/climateandhealth/effects/airway\\_diseases.htm](http://www.cdc.gov/climateandhealth/effects/airway_diseases.htm)
3. <http://www.cdc.gov/asthma/triggers.html>

# Traffic related death



1. [http://www.peoplepoweredmovement.org/site/index.php/site/memberservices/2012\\_benchmarking\\_report/](http://www.peoplepoweredmovement.org/site/index.php/site/memberservices/2012_benchmarking_report/)

# Chronic Disease Burden

- ❑ **Physical inactivity a major risk factor of chronic diseases like heart disease, diabetes & stroke. <sup>1</sup>**
- ❑ **Chronic diseases are the leading cause of death in the US<sup>2</sup>**
- ❑ **Relying on motor vehicles and less on active transportation reduces opportunities for utilitarian physical activity.**

1. [http://www.cdc.gov/healthyplaces/transportation/promote\\_strategy.htm](http://www.cdc.gov/healthyplaces/transportation/promote_strategy.htm)
2. <http://www.cdc.gov/chronicdisease/overview/index.htm>
3. <http://ephtracking.cdc.gov/showCommunityDesignAddLinkTypesOfTransportationToWork.action#exposure>
4. <http://www.cdc.gov/obesity/adult/causes/index.html>

# Health Benefits of Regular Physical Activity

## Children and Adolescents

- Improved cardiorespiratory fitness
- Improved muscular fitness
- Improved bone health
- Favorable body composition
- Improved cardiovascular and metabolic health biomarkers

## Adults

- Lower risk of heart disease and stroke
- Lower risk of high blood pressure
- Lower risk of type 2 diabetes
- Lower risk of colon and breast cancer
- Prevention of weight gain
- Improved cardiorespiratory and muscular fitness
- Prevention of falls
- Reduced depression
- **Lower risk of early death**

**Physical activity is a wonder drug.**

**But only about half the population gets recommended levels**

US Department of Health and Human Services. 2008 Physical Activity Guidelines for Americans. Washington, DC: U.S. Department of Health and Human Services; 2008.



“We do not stop exercising because we age, we age because we stop exercising . . . We are under-exercised as a nation. We look, instead of play. We ride, instead of walk. Our existence deprives us of the minimum of healthy activity essential for healthy living”



# CDC Transportation and Health Policy Recommendations ([www.cdc.gov/transportation](http://www.cdc.gov/transportation))

1. Reduce injuries associated with motor vehicle crashes
2. Improve air quality
3. Expand public transportation
4. Promote active transportation
5. Encourage healthy community design

[www.cdc.gov/transportation](http://www.cdc.gov/transportation)



# Promote Active Transportation

**Active transportation systems should connect the places where people live, learn, work, shop, and play by providing safe and convenient walking and bicycling facilities.**

- ❑ **Promote safe and convenient opportunities for physical activity** (e.g. Well-lit sidewalks, shared-use paths, and recreational trails; safe roadway crossings; bike infrastructure; connections to public transportation and parks)
- ❑ **Devote increased resources to non-motorized transportation**
- ❑ **Consider incentives to reduce vehicle miles traveled per capita**
- ❑ **Evaluate and promote promising practices** (e.g. NACTO Guidelines; Complete Streets; off road paths; bike infrastructure like cycletracks and bicycle boulevards; safe routes to schools; safe routes to everywhere)
- ❑ **Develop complete pedestrian and bicycle master plans to incorporate into city general plans and capital improvement programs.**
- ❑ **Integrate use of pedestrian and bicycle design guidelines into transportation planning.**
- ❑ **Explore opportunities for increasing availability of funds**

## Other related Recommendations

- ❑ **Encourage “smart growth”** land use planning policies
- ❑ **Encourage “complete streets”** and **“safe routes to schools”** with robust bike/ped infrastructure
- ❑ **Safe, convenient, and affordable transportation options** for everyone
- ❑ **Policies that protect pedestrians and bicyclists from motor vehicle crashes** (e.g. street design and traffic calming; increased legal protections)
- ❑ **Multimodal level of service indicators**
- ❑ **Bicycling and walking to public transit** (e.g. increased bike/ped safety and accessibility, public bike systems)
- ❑ **Increase resources for public transit** (e.g. flexible transportation funding and policy)
- ❑ **Evaluate effectiveness of incentives to reduce VMT**



## Other Public Health Policy Statements

- American Academy of Pediatrics
- American Public Health Association
- Institute of Medicine
- National Prevention Strategy



## Next Steps: CDC programs

- ❑ **Partnerships in Community Health**
- ❑ **Racial and Ethnic Approaches to Community Health**
- ❑ **State and local programs to reduce Chronic Disease**
- ❑ **Tribal programs to reduce Chronic Disease**
- ❑ **Rural strategies to reduce obesity**
- ❑ **Physical Activity Policy Research Network**
- ❑ **Healthy Community Design Initiative to support Health Impact Assessment**
- ❑ **USDOT/CDC Transportation and Health Tool**

# Create a national movement



# Thank You

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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 or the Agency for Toxic Substances and Disease Registry

