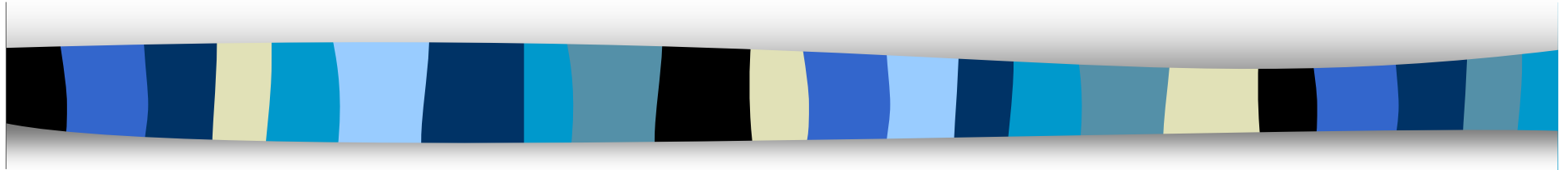


Climate Change and Health



Co-Benefits of Mitigation Strategies

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Mitigation and Adaptation

- Mitigation = Primary Prevention
 - Reduce greenhouse gases in the atmosphere to reduce or slow global climate change and prevent most severe outcomes

- Adaptation
 - Prevent or reduce the worst impacts of unavoidable climate change

What are co-benefits?

- Indirect benefits of GHG emission reduction or adaptation
 - The economic, social, environmental, public health and other benefits of global warming policies that are independent of any direct benefits from climate change mitigation or adaptation

Transportation, Climate Change, and Health

- Fossil fuel combustion
 - Large contributor to both GHG emissions (CO₂) and common air pollutants (PM₁₀, SO_x, NO_x)
 - Respiratory and cardiovascular disease
 - Transportation a major source of fossil fuel combustion
- Mitigation strategies in the transportation sector
 - Fuel Efficiency
 - Speed reduction
 - Reduce vehicle miles traveled
 - “Smart Growth”, public transit & active transport
 - Low carbon fuels
 - Biofuels & food security

Buildings, Climate Change, and Health

- Buildings use 60-70% electricity in US
 - Nearly 40% CO2 contribution
- Significant illness & impacts on worker & student performance
- California Sustainable Building Task Force (2003)
 - Energy efficiency measures can improve Indoor Air Quality
 - Potential significant annual savings and productivity gains:
 - Reduced respiratory disease - \$6 to \$14 billion from
 - Reduced sick building syndrome symptoms - \$10 to \$30 billion
 - Direct improvements in worker performance - \$20 to \$160 billion

Methane, Climate Change, and Health

- Methane over 20 times more effective in trapping heat in atmosphere than CO₂ over a 100-year period
- Livestock production is largest source of methane emissions
- Dietary animal fat: cardiovascular diseases, obesity, colorectal cancer, other cancers

What can public health do?

- Health Impact Assessments for mitigation & adaptation strategies
- Educate – ourselves, public, policy makers – about climate change and co-benefits
- Advocate for urgent and strong mitigation actions that maximize public health benefits
- Lead by example – personal and organizational carbon footprint reduction
- Monitor health impacts of climate change
- Monitor behaviors and social-economic-environmental factors that promote mitigation behaviors
- Protect vulnerable populations