# OF THE AMERICAS

# A Public Health Program

The Ciclovía-recreativa is the temporary closure of streets to motorized traffic, which allows the public to engage in physical activity through running, walking, cycling, and more. Policy Makers as well as city governments may find in Ciclovías a rather simple program to effectively promote physical activity in their communities.

# **An Emerging Problem**

In the 21st century, focus has shifted towards the increasing public burden of chronic illnesses such as cardiovascular disease, cancer, and diabetes.

The World Health Organization (WHO) quantified this increased burden when it estimated in 2005 that 60% of global deaths that year would be due to chronic diseases - more than twice the amount due to infectious diseases. Of these, 80% occurred in low and middle income countries where governments are least capable of responding to the high direct (i.e. health care expenditures) and indirect (i.e. lost economic productivity) costs associated with chronic disease. In fact, one study published by the WHO estimated the societal cost inflicted upon Latin American and the Carribean (LAC) by diabetes alone was \$65 billion USD in 2000.

Obesity and sedentary lifestyle represent major risk factors associated with chronic disease and are increasingly prevalent across the Americas. The Pan American Health Organization (PAHO) conducted a population-based study of LAC in 2002 showing that between 50% and 60% of adults are overweight. Anglo America is equally struck by this epidemic - 45% of adults in Canada are overweight with that number reaching 65% of adults in the United States. Rapidly developing cities, such as those in LAC, are particularly vulnerable to the interaction between sedentary lifestyle, obesity, and chronic disease as their populations lead less-active lifestyles with few options for physical activity.

Policy makers need a diverse set of tools to address emerging public health problems, such as increasing prevalence of chronic disease.

Ciclovía is one potential community-based program to consider.



More than 38 cities in 11 countries.

Participants per event range from 60 to 1,000,000.

Program frequency ranges from 18 to 64 events per year.

Program duration ranges from 2 to 12 hours.

Course length ranges from 1 to 121km (0.6 to 75 miles).

Annual budgets range from \$45,000 to \$2,072,896 USD.

# **A Possible Solution**

However, there are options to help policy makers address these issues head on. Research has shown a strong association between increased physical activity and reduced chronic disease in the general population and policies and programs, such as Ciclovía, already exist to help make this happen.

Ciclovía is a resource-efficient and easily adaptable program that provides the public with an equal opportunity to engage in physical activity. This is accomplished through the temporary closure of streets to motorized traffic, creating a safe and open space for pedestrians, runners, cyclists, and others.

In addition to physical activity, Ciclovía programs have been shown to create jobs through temporary businesses, provide opportunities for community service, and reduce traffic-related air pollution.

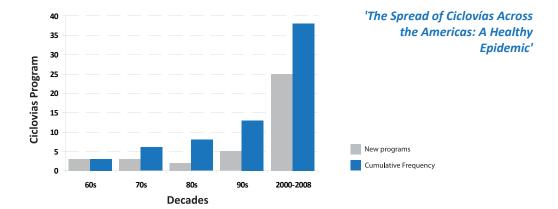
# Ciclovía: An Overview of Existing Programs

A diverse group of cities in the Americas are already enjoying the benefits of Ciclovía programs.





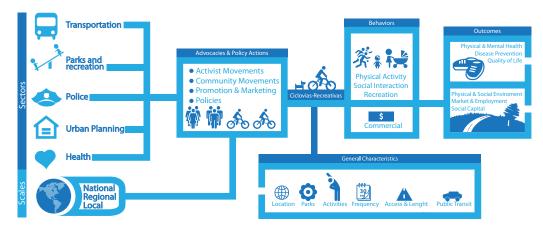
Such programs have not only been implemented in megacities like Sao Paulo or Mexico City, they have also appeared in small cities like Tulua with only 183,000 inhabitants.



# What We Already Know

People participating in Ciclovía for three hours a week (150 minutes) could be meeting their minimum weekly requirements for moderate-intensity physical activity as defined by the U.S. Department of Health and Human Services (HHS). Studies have shown that this amount of exercise can improve health outcomes and reduce the risk of coronary heart disease, stroke, some cancers, type 2 diabetes, osteoporosis, and depression (HHS).

Multisectorial framework to evaluate the Ciclovía program's development, continuity and effectiveness in public health



The different stages of new and established programs offer a unique opportunity for transnational studies aimed at assessing it's public health impact.



# **Community Testimonies**

# How would you describe the Ciclovía?

 "Like a small party, it is an environment for having fun, for exercise and for having fun. People come from all socio economic status. Even older adults." (Male, 71 years)

- •"... it is like soccer, like the stadium, everyone participates with no discrimination at all. The Ciclovía is a recreational or cultural, environmental or health event." (Women in the bicycle business)
- "... to improve health and enhance the environment. For people to live ir the community and to learn how to live together." (Male, 43 years)
- "It is very cool!, very relaxing, helps one to do exercise and to forget about many problems."
   (Mother)

# How would you describe the city without the Ciclovía?

- "Sad." (Male, 71 years)
- boring, because it is something we can do, is very cheap, and we have the whole way to go pretty far."
   (Male, 43 years)
- ""More pollution, more cars, as ...
  the monotony of every day and then
  ... more monotony."
  (Mother)

# **Beyond Physical Activity**

Ciclovía programs provide communities with many benefits beyond increased physical activity and improved health outcomes and quality of life .

A survey of existing Ciclovía programs in the Americas showed that 55% provide economic opportunities through temporary businesses. In Bogota, 96% of these vendors were from the three lowest socioeconomic strata and for one third Ciclovía was their only source of employment.

63% of programs surveyed also reported engaging the community through volunteerism, providing students completing national service or retired citizens the opportunity to give back to the community.

A study in Bogotá also found that adults participating in the Ciclovía-recreativa program at least one day per month were more likely to score higher on health-related QOL than adults who reported no program participation

Ciclovía may also have some environmental benefits. One pilot study in Bogota showed that particulate matter related to vehicular traffic was 13 times lower during Ciclovía than during a normal week day. This decrease could be the result of the replacement of 4,865 vehicles on the regular week day by 3,797 people during the Ciclovía in addition to the effect of a lower volume of vehicular traffic on Sundays.

# The Ciclovía a community-based program worthy of evaluation for replication!

## Fact sheet prepared by:

Olga L. Sarmiento<sup>1</sup>, Andrea Torres<sup>2</sup>, Enrique Jacoby<sup>3</sup>, Michael Pratt<sup>2</sup>, Thomas Schmid<sup>2</sup>, Gonzalo Stierling<sup>4</sup>, Diana Fernandez<sup>5</sup>, James Merrell<sup>1</sup>, Adriana Díaz del Castillo<sup>1</sup>, Jaime Parra<sup>1</sup>.

- <sup>1</sup> School of Medicine. Universidad de los Andes.
- 2 Physical Activity and Health Branch Division of Nutrition, Physical Activity and Obesity CDC WHO Collaborating Center for Physical Activity and Health National Center for Chronic Disease Prevention and Health Promotion Centers for Disease Control and Prevention
- Regional Advisor, Healthy Eating and Active Living. Non Communicable Diseases Unit, DPC/NC. Pan American/World Health Organization.
   Club Deportivo CicloRecreoVía Santiago, Chile
- 5 School of Architecture and Design, Universidad de los Andes

## Sources:

World Health Organization. WHO Global Report. Preventing Chronic Diseases. A Vital Investment.
Geneva: WHO: 2005.

Pan American Health Organization. Regional Strategy and Plan of Action on an Integrated Approach to the Prevention and Control of Chronic Diseases. Washington, D.C.: PAHO; 2007.

The Ciclovía-recreativa: a mass recreational program with public health potential. Olga L. Sarmiento, Andrea Torres, Enrique Jacoby, Michael Pratt, Thomas Schmid, Gonzalo Stierling. Unpublished manuscript.

## For more information contact:

Olga L. Sarmiento osarmien@uniandes.edu.co

# Funding:

Funded by the Centers for Disease Control and Prevention and the Pan American Health Organization Cooperative Agreement Grant number No. O/CNT/0800127.001

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











