Introduction

The Centers for Disease Control and Prevention’s (CDC) Health Impact in 5 Years (HI-5) initiative highlights community-wide approaches that can improve the places where we live, learn, work, and play. The following example from the North Carolina Division of Public Health was implemented before CDC developed the HI-5 initiative, but showcases the components that may be needed to carry out one of the HI-5 evidence-based approaches: the development and implementation of Safe Routes to School (SRTS) programs.

The State of North Carolina has a unique SRTS project, called Active Routes to School³, or ARTS, which is supported by a partnership between the North Carolina Department of Transportation (NCDOT) and the North Carolina Division of Public Health (NCDPH). ARTS is a community-based program designed to motivate school-age children to increase their daily physical activity.

ARTS employs 10 project coordinators to work with community partners to:

- Increase awareness about the importance of ARTS;
- Increase the number of programs that encourage walking and biking to or at school;
- Increase the number of training sessions that cover how to implement ARTS, as well as “Let’s Go NC!” – a pedestrian and bicycle safety skills program;
- Increase the number of policies that support walking and biking to and at school, such as early arrival and departure for walkers and bikers; and
- Identify safety features near schools (within 2 miles) such as sidewalks, crosswalks, and bike lanes that need improvement.

In addition to working with schools, ARTS project coordinators work within communities to identify opportunities to share facilities and to plan and design complete streets⁵ to provide more opportunities for physical activity and make it easier for everyone (including pedestrians, bicyclists, motorists and transit riders of all ages and abilities) to safely access active transit options.
Problem
As is the case in many other states, public health officials in North Carolina have expressed concern about increasing rates of heart disease, diabetes, and obesity among individuals in the state. Getting enough exercise or physical activity can help people stay healthy, avoid or delay the onset of disease, keep diseases they already have from becoming worse or debilitating, and lead productive lives. Together, the North Carolina Division of Public Health and the North Carolina Department of Transportation have been looking for ways to increase physical activity among school-age children.

The 2008 Physical Activity Guidelines for Americans recommend that children and adolescents should get at least 60 minutes of physical activity each day. Unfortunately, many children and adolescents do not get enough daily physical activity for a number of reasons. Regular activity in childhood and adolescence is important for promoting lifelong health and well-being and can help children and adolescents improve cardiorespiratory fitness, build strong bones and muscles, control weight, reduce symptoms of anxiety and depression, and reduce the risk of developing multiple health conditions, including heart disease, diabetes, and obesity.

Support from Multi-Sector Partners
Strong partnerships have been critical to North Carolina’s success. As a result of working together with NCDPH, NCDOT is engaging public health professionals and community stakeholders in developing their next comprehensive transportation plan, which will include public health goals. At the local level, project coordinators have reported developing strong partnerships with teachers, students, parents, and community organizations, and together they have built on the success of the ARTS program. Through these partnerships, many community organizations have secured grant funding to establish safety-related infrastructure changes and outdoor learning environments, as well as to acquire shared-use signage and bike trailers. In communities where automobile traffic impedes regular ARTS activities, schools have introduced walk- or bike-at-school programs, in which physical activity through walking and biking is incorporated into the school day on campus.

Impact
From 2014 to 2016, the number of walking events that took place at school increased substantially—from 33 to 92—with over 73,000 elementary and middle school children participating. Research has shown that one-time events like “Walk to School Day” can increase the number of students who walk or bike to school, even weeks after the event. In 2015, project coordinators noted a number of events that lead to policy changes including adding bicycle and pedestrian safety education into the physical education curriculum, promoting walking and biking in school policies, and adding sidewalks, bike paths, and crosswalks.
Sustainability

In order to sustain the momentum of programs that are already in place, ARTS project coordinators have focused on cultivating strong relationships with professionals who design and build pedestrian and bicycle infrastructure, as well as community advisory boards, bicycle and pedestrian councils, parent-teacher associations, local universities, and parent groups. Project coordinators are also looking for ways to integrate bicycle and pedestrian safety training into school curricula, and recruit champions within schools who can continue to organize special events and find ways to fit active travel into community planning.

About CDC’s HI-5 (Health Impact in 5 Years) Initiative

HI-5 strategies can help you achieve healthy outcomes in your community in 5 years or less, providing good economic value for the investment. CDC reviewed the science to focus on 14 proven approaches that rose to the top as attainable wins for public health. Safe Routes to School is just one of the 14 evidence-based interventions identified. CDC’s HI-5 initiative can help you make decisions about what works and where to focus efforts to improve public health. To find out more about how your community can use the HI-5 initiative to improve the health of all people, visit the HI-5 website: www.cdc.gov/hi5.

This publication was supported by the Centers for Disease Control and Prevention (CDC) cooperative agreement #NU380t000161-04-01 awarded to the Association of State and Territorial Health Officials (ASTHO). The contents are solely the responsibility of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.

CDC would like to thank ASTHO and the North Carolina Division of Public Health for their significant contributions to the HI-5 series of stories with public health innovators across the United States. Please contact pophealth@astho.org with any questions.
References


For more case examples of HI-5 approaches, please refer to www.cdc.gov/hi5