

# Using GIS Maps to Improve Diabetes Prevention in New York

*[Announcer] This program is presented by the Centers for Disease Control and Prevention.*

[Bret Atkins] Geographic Information Systems, or GIS, are powerful tools for improving the surveillance, prevention, and treatment of chronic diseases. Through the use of GIS, public health professionals can create maps and overlay data by location, often revealing patterns not readily apparent in data tables and other graphics.

CDC's Preventing Chronic Disease Journal has created a new GIS Snapshots series to demonstrate the diverse uses of GIS and improve chronic disease prevention. I'm Bret Atkins for Preventing Chronic Disease. This podcast features Rachael Ruberto, New York State Department of Health research scientist and the author of the journal's most recent GIS Snapshots article.

[Rachael Ruberto] Hi. I'm Rachael Ruberto, lead author and creator of a *GIS Snapshots* article entitled Geographic Access to Diabetes Prevention Program Sites: New York State Department of Health.

In this article, New York's Bureau of Chronic Disease Evaluation and Research used GIS to identify counties with people at high risk for prediabetes. We began by giving the observed New York areas scores based on county-level prevalence of obesity, physical activity, hypertension, and diagnosed diabetes. We found that, although nearly 80 percent of New York's population lives within a 30-minute drive time to an existing Diabetes Prevention Program site, the majority of those living in the 10 counties with the highest prediabetes risk factor score live farther than 30-minutes from a site.

The New York State Department of Health has used GIS analysis to identify areas with limited access to prevention programs and encouraged key partners to locate programs in community-based organizations serving at-risk populations. Our future plans include expanding the analysis to incorporate all evidence-based chronic disease programs. We also want to examine demographic differences among people living within and outside the 30-minute radius to program sites.

Our GIS map displays the location of all existing and potential Diabetes Prevention Program sites in New York State as of July 2012. Thirty-minute drive time boundaries to existing sites and prediabetes risk factor scores by county are also displayed. The map highlights key geographic disparities in accessing Diabetes Prevention Program sites, especially among New Yorkers living in counties with the highest risk of developing diabetes.

We believe the addition of Diabetes Prevention Program sites in New York would improve access to prevention programs and improve community-clinic linkages across the state, supporting type 2 diabetes prevention efforts.

[Bret Atkins] To view Rachael's article and the GIS map she discussed, visit [cdc.gov/pcd](http://cdc.gov/pcd) and click on *PCD GIS Snapshots*.

[Announcer] For the most accurate health information visit [www.cdc.gov](http://www.cdc.gov) or call 1-800-CDC-INFO.