Chronic Disease GISSNAPSHOTS HOW HEALTH DEPARTMENTS USE MAPS TO ADDRESS CHRONIC DISEASES

Maine Center for Disease Control and Prevention

APRIL 2013

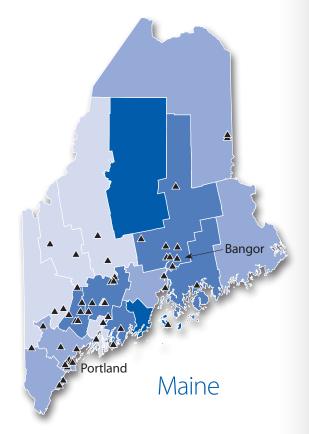
Improving Accurate Blood Pressure Monitoring

Background: Hypertension is a major contributor to heart disease and stroke, and more than half of U.S. adults with hypertension do not have the condition under control. An important step toward hypertension control is to ensure that health care professionals measure blood pressure accurately. Although accurate measurement is essential for effective diagnosis and treatment of hypertension, measurement is not always performed according to established guidelines.

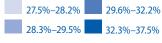
To improve the accuracy of blood pressure measurement, the Maine Cardiovascular Health Program established a Master Blood Pressure Trainer (MBPT) program that provides blood pressure measurement training to health care professionals in clinics, private practices, and hospitals. The program also provides a forum in which MBPTs can share successful quality improvement efforts with representatives from other health systems and practices.

Action: Maine used GIS to map the location of MBPTs throughout the state and evaluate whether they were placed strategically in areas of most need. Using this information, the state aims to improve quality in blood pressure measurement practices by coordinating more trainings in counties with high rates of hypertension and few MBPTs.

The development of this map also led Maine to increase its efforts to collect data on the location and number of trainings conducted by MBPTs. With new data, Maine will be able to produce additional maps that highlight the reach of this quality improvement training program for blood pressure.



HYPERTENSION PREVALENCE* (QUARTILES)



Master Blood Pressure Trainers

*Age-adjusted prevalence.

Source: Behavioral Risk Factor Surveillance System (2009).

This map shows the location of MBPTs trained from 2008 to 2012 and the prevalence of self-reported hypertension throughout Maine. Mapping these data sets together reveals the counties that have higher prevalence of hypertension with few or no MBPTs.

Enhancing GIS Capacity

Staff from the Maine Center for Disease Control and Prevention enhanced geographic information systems (GIS) capacity within their agency by participating in a collaborative GIS Capacity Building Project provided by CDC, the National Association of Chronic Disease Directors, and the Children's Environmental Health Initiative at the University of Michigan.

The Power of GIS

Learn more about how public health personnel use the power of GIS to address chronic diseases and submit your own maps to the Chronic Disease GIS Exchange:

www.cdc.gov/dhdsp/maps/gisx.

For more information please contact

Centers for Disease Control and Prevention 1600 Clifton Road NE Atlanta, GA 30333

Telephone: 1-800-CDC-INFO

(232-4636)

TTY: 1-888-232-6348 E-mail: cdcinfo@cdc.gov Web: www.cdc.gov

National Center for Chronic Disease Prevention and Health Promotion

Division for Heart Disease and Stroke Prevention