Request for Applications

National Association of Chronic Disease Directors
Geographic Information Systems (GIS) Training for Surveillance of Heart
Disease, Stroke and Other Chronic Diseases in Local Health Departments

Funding Availability to Select Local Health Departments

Key Dates:
Applications are due January 16, 2015
Notification by February 23, 2015

Eligible Local Health Department Applicants

Local health departments (LHDs) that have not previously participated in the National Association of Chronic Disease Directors Geographic Information Systems (GIS) Training for Surveillance of Heart Disease, Stroke and Other Chronic Diseases in Local Health Departments training project are eligible to apply.

Eligible LHDs must be located in the following states that have participated in the National Association of Chronic Disease Directors Geographic Information Systems (GIS) Training for Surveillance of Heart Disease, Stroke and Other Chronic Diseases in State Health Departments: Arkansas, California, Colorado, Florida, Louisiana, Idaho, Indiana, Iowa, Kansas, Maine, Massachusetts, Michigan, Minnesota, Mississippi, Montana, Nebraska, New Hampshire, New Mexico, New York, North Carolina, Ohio, Oklahoma, Pennsylvania, South Carolina, South Dakota, Texas, Utah, Vermont, and Wisconsin.

Executive Summary

The GIS Surveillance project is funded by the Centers for Disease Control and Prevention and is designed to enhance the ability of Local Health Departments (LHDs) to integrate the use of GIS into daily operations that support existing priorities for surveillance and prevention of heart disease, stroke, and other chronic diseases.

As the project seeks to encourage the development of new and existing partnerships between LHDs, this RFA provides the opportunity for LHDs in close proximity to one another to collaborate in the training and application of GIS techniques for chronic disease surveillance and prevention. LHDs are required to partner with neighboring health departments as part of this training. Although each health department should submit a separate application, a group statement should be included to document how departments will collaborate with each other. Each group should consist of 2 - 4 partnering LHDs that are geographically close enough for all participants to meet for several full day GIS trainings.

The GIS Surveillance project is directly relevant to the goals of Million Hearts™ as it significantly enhances the capacity of LHDs to design and implement programs focused on heart disease and stroke prevention and treatment. Increased GIS capacity within LHDs will be leveraged to create opportunities for collaboration and partnership with a variety of chronic disease-related public and private organizations at the local level. In addition, GIS offers a powerful set of tools for addressing the core domains of a coordinated approach to prevent chronic diseases and promote population health: 1) epidemiology and surveillance, 2) evidence-based practice and environmental approaches, 3) health systems interventions - clinical preventive services, and 4) community-clinical linkages.

Participating health departments will work to inform heart disease, stroke, and other chronic disease policies, plans, and programs through GIS-based projects. They will commit personnel to the project; establish hardware, software, and data infrastructure; define project scope; and develop and implement GIS applications. These applications will make use of GIS surveillance and mapping to address four impact areas: 1) documenting geographic disparities; 2) informing policy and program decisions; 3) enhancing partnerships with external agencies; and 4) facilitating collaboration within agencies.

Terms of the Award

Participating Local Health Departments will receive:

•A hardware and software needs assessment;

•An ESRI software grant to cover the needed GIS software for core team members and if applicable computer lab machines;

•Access to telephone- and web-based expert GIS consultation from training staff at the University of Michigan; and

•A total of 3 training events. 2 GIS trainings will be full day hosted events at a central location (all travel costs to be paid by the University of Michigan), and 1 web based training activity with a mix of self-guided and group interactions. These GIS training events will be held during the following months (exact dates will be determined following selection):

- March 2015
- May 2015
- August 2015

Participating Local Health Departments will be expected to:

- Identify a group that consists of 2-4 LHDs in close proximity to one another that will participate in the GIS Surveillance training together and will collaborate on the application of GIS to chronic disease surveillance and prevention in their communities.

- Establish a Core GIS team within each LHD. The core GIS team within each LHD will consist of a minimum of 2, maximum of 4 staff members who will participate in all trainings. At least 1 staff member from each LHD should work on issues regarding heart disease and stroke prevention and treatment.

- Establish an expanded GIS team within each LHD. The expanded GIS team will support and provide guidance to the core GIS team members. The expanded GIS team should consist of staff members with diverse skill sets such as: epidemiology, program management, information technology, health department leadership, statistics, heart disease and stroke content expertise, and content expertise for other chronic diseases. The establishment of a strong and supportive GIS team is critical to the long-term success of integrating GIS surveillance activities into the infrastructure of the health department.

- Identify a GIS Team Lead for each partner LHD. The GIS Team Lead will be responsible for coordinating and supporting members of the core GIS team and the expanded GIS team within his/her LHD. The GIS Team Leads from each of the partnering LHDs will also collaborate with each other. Each GIS Team Lead must attend all of the trainings. Ideally, each GIS Team Lead will have responsibilities within the LHD that deal with some aspect of heart disease and stroke prevention, treatment or surveillance. If not, then a staff member who works with heart disease and stroke will be expected to attend a portion of the first GIS training (any travel costs incurred would be covered by the University of Michigan).

- Participate in regular conference calls scheduled between GIS trainings, as well as online GIS training sessions.

- Develop maps and map projects that address each of the four impact areas listed above in the Executive Summary (documenting disparities; informing policy and program decisions; enhancing partnerships with external agencies; and facilitating collaboration within agencies), with maps for heart disease and stroke in at least three of the categories.

-Have access to and utilize at least one dataset with point-level data (i.e., includes street address information). These data can be patient or non-patient data (e.g., location of local pharmacies). All LHD trainees will receive training on how to deal with the special confidentiality issues associated with geographically-referenced patient-level data.

- Work to produce maps in keeping with the standards and criteria established by the Centers for Disease Control and Prevention, National Association of Chronic Disease Directors and the University of Michigan.

-Share copies of maps produced during the course of the training with University of Michigan, NACDD, and CDC staff (unless sharing of particular maps is not approved by the state health department), including posting maps to the CDC's web-based Chronic Disease GIS Exchange http://www.cdc.gov/dhdsp/maps/gisx/

-Participate in the tracking and evaluation system built into the project, as well as in the development of manuscripts that document the impact of the training for SHDs and other documents that showcase the use of GIS for chronic disease surveillance in SHDs (e.g., Chronic Disease GIS Exchange http://www.cdc.gov/dhdsp/maps/gisx/ Chronic Disease GIS Snapshots, Highlights documents)

Evaluation Criteria:

Groups of partnering LHDs will be competitively selected for participation in this project. Selection of partnering LHDs will be based on the following components (the weight for each component is included in parentheses):

Each LHD will be scored on the following components:

-Knowledge of current health department GIS capacity (20%);

-Vision for utilizing GIS for heart disease and stroke prevention within the health department (30%);

-Potential for collaboration among chronic disease programs within the health department or with other local partners (e.g., health care systems, coalitions) (20%);

- Project commitment (30%);

-All eligible health departments are encouraged to apply.

How to Apply

Complete all application components as noted below. Instructions for completing this form are included with the accompanying technical assistance document. You must submit this application electronically; save your completed form and attach it to an e-mail, addressed to: Joshua Tootoo at: jltootoo@med.umich.edu

Supporting materials can be sent as separate files and submitted electronically along with the completed RFA, or they can be sent as hard copies to:

<div align="center">

Joshua Tootoo,
School of Natural Resources and Environment
University of Michigan
2046 Dana Building, 440 Church Street
Ann Arbor, MI 48109

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Application Components:

1. **Identify Partnering Local Health Departments**

1.1 Please identify the local health departments that your team will be partnering with below:

1.2 Please submit a joint statement identifying a single shared priority and how you will work with your partner local health departments to use GIS to enhance this priority (e.g., data or resource sharing, enhancing shared initiatives).

This statement may also include examples of previous collaborations. A single joint statement should be submitted for all partnering local health departments. You may include this joint statement below:

2. **GIS Team Lead for your LHD**. Please provide the contact information for the person within your local health department who will be providing leadership for this project. This person will serve as the GIS Team Lead for the Core GIS Team and the Extended GIS Team. Ideally, this person should be working on heart disease and stroke prevention, treatment or surveillance and can be an epidemiologist, program manager, evaluator, or hold another relevant position in the health department. Amongst other leadership opportunities, this person will be responsible for attending all GIS trainings.

State	
Health Department Name	
Project Lead Name	
Project Lead Position	
Organizational Unit Within Department	
Phone Number	
e-mail	

3. **Existing GIS Capacity for Heart Disease and Stroke Prevention**. Please provide the following information regarding the existing GIS capacity within the division/administrative unit of your local health department that is responsible for heart disease and stroke prevention (Please note that low current GIS capacity will not detract from the competitiveness of your application; knowing your current GIS capacity will improve the competitiveness of your application).

3.1 What is the name of the division/unit within your health department that is responsible for heart disease and stroke prevention?

3.2. How many people work in the division/unit responsible for heart disease and stroke prevention?

3.3. How many people within the division/unit responsible for heart disease and stroke prevention are currently using GIS?

3.4 Please list up to 3 projects within the division/unit responsible for heart disease and stroke prevention that use GIS and provide a one sentence description of the projects. Please note that low current GIS capacity will not affect the competitiveness of your application; knowing your current GIS capacity will improve the competitiveness of your application. Note: If you would like to describe more than 3 projects in this section, please add the additional projects at the end of the application in the section entitled additional text.

Project 1

Project 2

Project 3

[   ]

4. **Existing GIS Capacity in other parts of the health department** Please list up to 3 projects that are examples of existing GIS Capacity in other parts of the local health department (e.g. other chronic disease units, environmental health, etc.). Note: If you would like to describe more than 3 projects in this section, please add the additional projects at the end of the application in the section entitled additional text.

Project 1

[   ]

Project 2

[   ]

Project 3

[   ]

5. **Priorities.** The following questions relate to the current priorities, including Million Hearts™, within your local health department that address the prevention of heart disease, stroke, and other chronic diseases. Answers to these questions may overlap or complement each other.

5.1 Please indicate the current priorities for heart disease, stroke and other chronic diseases in your agency and provide a brief description of how you would like to use GIS to support and enhance these priorities. In your answer, consider the following ways in which GIS could be used to address your stated priorities:
1) Documenting geographic disparities for heart disease, stroke and other chronic diseases,
2) Informing policy and program decisions,
3) Enhancing partnerships with external agencies, and
4) Facilitating collaboration within agencies.

6. **Data Resources.** Please list and provide a one-sentence description of existing data sets that are relevant to your participation in this GIS capacity-building project. Please note that the data sets do NOT need to be spatially referenced data sets (i.e., already formatted for use in GIS software). Please note that your current data availability will not affect the competitiveness of your application; knowing your current data availability will improve the competitiveness of your application.

Datasets

7. **Community Profile.** Please provide the following information for your community (county/counties within your Jurisdiction). For multiple counties you may enter multiple lines of values.

Please note you may use whatever data resources you have available.
County-level health information demographic information can be found here:
http://nccd.cdc.gov/DHDSPAtlas

County-level health information Heart Disease and Stroke Death rates can be found here:
http://www.countyhealthrankings.org/

<u>Demographics</u>

Total Population   [   ]

Percent 65+   [   ]

Percent White   [   ]

Percent Black   [   ]

Percent Hispanic   [   ]

Median
Household
Income   [   ]

Percent below
Poverty Level   [   ]

<u>Health Outcomes</u>

Stroke Death
Rate/100,000   [   ]

Heart Disease
Death
Rate/100,000   [   ]

8. **Collaboration within the Local Health Department and/or with Local Partners**. Describe collaborations between staff working on heart disease and stroke prevention and staff in other chronic disease programs either within the local health department or other local partners (e.g., health care systems, coalitions, community organizations). In the box below entitled 'Partner Type' please indicate whether the partner is *internal* (within the local health department) or *external*. If an external partner, please indicate which sector the partner belongs to.

Focus your descriptions on existing or future collaborations that would be enhanced by the use of GIS. Please include a letter(s) of support from any chronic disease program(s) with whom collaboration regarding GIS projects is envisioned. Supporting materials can be sent as separate files and submitted electronically along with the completed RFA, or hardcopies mailed to the address specified for Joshua Tootoo.

Space is provided for up to five projects, but it is not required to have five projects.

Partner type	Partner name	Brief description of partnership and how it could be enhanced by GIS

Partner type	Partner name	Brief description of partnership and how it could be enhanced by GIS

9. **Available computer lab facilities.** Please describe to the best of your ability the computer lab facilities within your health department that could host web-based GIS training events and group work sessions.

Number of workstations

Hardware type

Installed software

Networking and printing

Please include contact information (name, position, e-mail and phone number) for appropriate technology staff for these computing resources.

10. **Support**. Please list three (3) specific ways that the GIS Team Lead for this project and appropriate management will support the efforts of the members of the Core GIS Team and facilitate active participation with the members of the Extended GIS Team.

11. **GIS Team Members.** . Please list the minimum of 2, maximum of 4 people that will constitute the Core GIS Team and the names of additional people that will participate in the Extended GIS Team. The members on the Core GIS Team will be expected to attend/participate in all of the GIS trainings during the 6 month project period, 2 of which will be hosted at a to be determined central location and 1 web-based seminar (travel costs to be covered by the University of Michigan). Members of the Extended GIS Team will provide on-going support and feedback throughout the time of the training and beyond. The Extended GIS Team should include a diverse set of staff members with the following types of skill sets: epidemiology, program management, information technology, local health department leadership, statistics, heart disease and stroke content expertise, and content expertise for other chronic diseases. The establishment of a strong and supportive GIS team is critical to the long-term success of integrating GIS surveillance activities into the infrastructure of the local health department.

Please indicate by checking the appropriate box whether the listed team members are members of the Core GIS Team, or the Extended GIS Team.

Name

Role

☐ core team

☐ extended team

Position in health department

Description of duties

GIS Experience

Name

Role

☐ core team

☐ extended team

Position in health department

Description of duties

GIS Experience

Name

Role

☐ core team

☐ extended team

Position in health department

Description of duties

GIS Experience

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GIS Experience

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Role

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☐ extended team

Position in health department

Description of duties

GIS Experience

Name

Role

☐ core team

☐ extended team

Position in health department

Description of duties

GIS Experience

Name

Role

☐ core team

☐ extended team

Position in health department

Description of duties

GIS Experience

12. **Approval. By checking the box on the following page, I confirm that if chosen as one of the local health departments to participate in the GIS capacity-building project, our local health department commits to participating in this project for 9 months in the following ways:**

1. Work with University of Michigan personnel on hardware, software, and personnel training needs assessment.

2. Work with University of Michigan and the information technology department within our Local Health Department to set up the necessary hardware and software for Core Team members, and if applicable within the host computer lab by March 2014.

3. Commit a minimum of 2 and maximum of 4 staff people from within our local health department (or partnering agency that works closely with the local health department) to attend training and project development sessions at centrally located host site 2 times (Travel costs to be covered by University of Michigan); and Commit to having these same staff members participate in the web-based training activity, all during the 6 month project period.

4. Commit the Heart Disease and Stroke Prevention Program Manager or Chronic Disease Director (or other decision maker) to attend the initial hosted training event (travel costs to be covered by University of Michigan).

5. Develop and implement GIS projects/maps that address each of the following categories: 1) documenting geographic disparities; 2) informing policy and program decisions; 3) enhancing partnerships with external agencies; and 4) facilitating collaboration within agencies. The final progress report must include at least two finished maps for each of the four (4) impact areas, with maps for heart disease and stroke in at least three (3) of the categories. Finished maps must incorporate comments from the review process built into the training program.

6. Participate in monthly conference calls with training staff from University of Michigan.

7. Participate in the tracking and evaluation system built into the project, as well as in the development of manuscripts that document the impact of the training at the local health departments and beyond.

8. Submit a final progress report on the development and status of GIS capabilities and applications within the local health department.

9. Share the skills you have developed and your ideas for using GIS to address heart disease, stroke and other chronic diseases with other public health professionals by submitting your maps for the following purposes:

a) Posting your maps on the Chronic Disease GIS Exchange, a web-based forum created by CDC for sharing specific examples, ideas and techniques for using GIS in the prevention of heart disease, stroke, and other chronic diseases. (http://www.cdc.gov/dhdsp/maps/gisx)

b) Publication in the Highlights Report: Mapping Heart Disease, Stroke and Other Chronic Diseases: A Program to Enhance GIS Capacity within SHDs published by CEHI at University of Michigan. The maps displayed in this document highlight examples of how each participating health department produced maps to support their chronic disease priorities by documenting the burden, informing program and policy development, and enhancing partnerships. Past highlights documents can be found here:

Phase I http://cehi.snre.umich.edu/sites/default/files/PhaseI_Highlights.pdf

Phase II http://cehi.snre.umich.edu/sites/default/files/PhaseII_Highlights.pdf

Phase III http://cehi.snre.umich.edu/sites/default/files/PhaseIII_Highlights_final.pdf

Phase IV http://cehi.snre.umich.edu/sites/default/files/100213PhaseIV_Highlights_Report_WEB.pdf

Phase V http://cehi.snre.umich.edu/sites/default/files/Phase5_HL_060914_web.pdf

c.) Submitting high impact maps to the CDC's online journal Preventing Chronic Disease Chronic Disease as GIS Snapshots (http://www.cdc.gov/PCD/issues/GIS_TOC.htm).

Project Lead: Name and Position

[   ]   ☐ I agree to the above

Project Lead's Supervisor: Name and Position

[   ]   ☐ I agree to the above

Additional text

[   ]