

ASTHO Environmental Health Tracking: Peer-to-Peer Fellowship Program

Phase I Report



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Fellowship Participant:

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Submitted to:

Association of State and Territorial Health Officials
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BACKGROUND

The Rhode Island Department of Health (RIDOH) is the statewide health agency responsible for protecting and promoting the health of Rhode Islanders, serving a population of 1,050,292. The primary mission of RIDOH is to prevent disease and to protect and promote the health and safety of the people of Rhode Island.

Furthering its overall mission, RIDOH has added to its vision the commitment to track environmental health outcomes and provide Nationally Consistent Data and Measures (NCDMs) to the National Environmental Public Health Tracking Network (NEPHTN).

A key characteristic of Tracking is the emphasis on data integration across health, human exposure, and hazard information systems. An Environmental Health Tracking Fellowship Program in Rhode Island allows for the utilization of integrated environmental and health data to obtain information in support of activities that improve the health of communities. Moreover, contributing to the NEPHTN through the ASTHO Fellowship Program advances state and local public health capacity in the area of environmental health surveillance.

Environmental hazards affect human health and have important public health consequences. Like many state health departments, RIDOH's ability to take effective action to reduce the consequences of environmental risks is limited by surveillance systems that cannot link environmental and health data. Through ASTHO's Environmental Public Health Tracking Peer-to-Peer Fellowship Program RIDOH has been able to utilize data and information regarding health outcomes including Hospitalizations and Emergency Department data. The availability of these types of data in a standardized network enable researchers, public health authorities, healthcare practitioners, and the people of Rhode Island to have a better understanding of the possible associations between the environment and adverse health effects and contribute significantly to the National Tracking Network.

INTRODUCTION

The purpose of a Rhode Island's participation in the ASTHO Tracking Fellowship Program is to establish data partnerships and collaboration within RIDOH, CDC, ASTHO, and other state fellows, and to compile statewide data on NCDMs for inclusion on the National Tracking Network and one day, the state network.

Through ASTHO's Tracking Fellowship Program, RIDOH will develop, implement, and maintain a Public Health Tracking Program for the state of Rhode Island. The State Program will utilize integrated health and environmental data to obtain information in support of activities that improve the health of communities. RIDOH's Public Health Tracking Program established through this opportunity will advance state and local public health capacity in the area of environmental health surveillance, create partnerships with local, state, and federal partners, and provide NCDMs to the National Tracking Network.

Measurable outcomes of the program will be in alignment with the following performance goals for the National Center for Environmental Health (NCEH): Prevent or reduce illnesses, injury,



and death related to environmental risk factors; and increase the understanding of the relationship between environmental exposures and health effects.

RESULTS

Using the tracking metadata standard and tools, RIDOH has utilized Phase I to create metadata files that will be made available on the national metadata registry during Phase II.

RIDOH registered with CDCs Secure Access Management System (SAMS) to gain access to the NEPHTN Data Submission Application (Secure FTP) that will securely transport NCDMs and associated metadata to the National Tracking Network. RIDOH's Division of Infectious Disease and Epidemiology (IDE) currently utilize SAMS for all CDC data submissions. Leveraging this existing infrastructure and experience will ensure the most efficient and timely transport of data to CDC.

Furthermore, RIDOH has ensured all appropriate security controls are specified, incorporated, and tested in accordance with guidance issued by the National Institute of Standards and Technology (NIST). RIDOHs current security model is a three-tier (database server, application server, and reverse-proxy server) security infrastructure with security structures in place for both secure and public-facing portals. This structure will play an important role in future NCDM submissions as well as submission of Hospital and ED data during Phase II.

Collaboration

Inter-agency collaboration is an essential component to a successful Environmental Health Tracking Fellowship with partners taking an active participatory role through the Technical Advisory Group (TAG). The TAG is responsible for providing technical guidance to ensure implementation of ASTHOs Environmental Public Health Tracking Program strategies, activities, and outcomes. Throughout Phase I, TAG members (Table 1) have worked closely to review project timelines, data and reporting requirements, data and access requirements, communication, and program effectiveness.

Table 1: TAG Membership

ASTHO Tracking Fellowship: Technical Advisory Group Membership		
Name	Title	TAG Role and Affiliation
Amie Parris*	Assistant Health Program Administrator	Project Lead
Samantha Viner-Brown*	Chief, Center for Health Data and Analysis	Data Steward Lead
Kathy Taylor*	Systems Analyst, Center for Health Data and Analysis	Data Steward
Megan Towle*	Public Health Epidemiologist, Asthma Control Program	Data Steward
Robert Childs	Chief, Division of Information Technology	Information Technology
John Fulton, Ph.D.	Assistant Director of Health Policy	Evaluator
Andrea Bagnall-Degos	Chief, Division of Communications	Communications/Web Lead

* ASTHO Fellowship Program Key Staff

TAG workgroup meetings (Table 2) have fostered a greater understanding of the resource needs for data creation efforts as well as developing a statewide EPHT Program. This understanding is



the basis for plans to share data and resources most effectively among partners and assure effective implementation of measures needed for future participation in the NEPHTN.

Table 2: TAG Workgroup Meetings

ASTHO Tracking Fellowship: TAG Workgroup Meetings		
Date	Participants	Discussion Topics
1/15/2015	Amie Parris, Sam Viner-Brown, Kathy Taylor	Project Timeline, Reporting Requirements, Check-in Call Schedule, Sharepoint Access and Downloads
4/9/2015	Amie Parris, Sam Viner-Brown, Kathy Taylor	SAMS Access, Metadata Creation Tools, RI DUA Requirement, Data Intentions
Phase II Scheduled Meetings		
7/10/2015	Amie Parris, Sam Viner-Brown, Kathy Taylor, Megan Towle, Julian Drix, Jen McNulty	New Data Steward, Phase I Report, CDC NEHT Conference
8/20/2015	Amie Parris, Sam Viner-Brown, Kathy Taylor, Megan Towle	Metadata Pre-Submission Review Feedback, Full Metadata Submission, Phase II Data Submission

Project Activities

The following Table presents activities achieved during Phase I of the ASTHO Tracking Fellowship Program. Many of these activities were accomplished with assistance from CDC Tracking support, New York EPHT Program, CDC NCEH support, and ASTHO.

Table 3: Phase I Activities

Activity	Date	Designated Staff
Informational Call	19-Nov-14	Project Lead
Phase I: January 12, 2015-June 30, 2015		
TAG Meeting: Initial Meeting and Timeline Presentation	15-Jan-15	TAG Members
Web Conference Kick-Off Meeting	22-Jan-15	Project Lead/Data Stewards
Check-in Call	5-Feb-15	Project Lead
Acquisition of Data	13-Feb-15	Data Stewards
Check-in Call	19-Feb-15	Project Lead
CDC Tracking Branch 2015 Data Submission Webinar	5-Mar-15	Project Lead/Data Stewards
Preparation of Data Files	6-Mar-15	Data Stewards
Check-in Call	19-Mar-15	Project Lead
Call with New York on ED-NCDM Tool Configuration	26-Mar-15	Data Steward
Call with CDC support on SAMS Access	27-Mar-15	Data Steward
Check-in Call	2-Apr-15	Project Lead
TAG Meeting: Status Meeting on Data Acquisition	9-Apr-15	TAG Members
Check-in Call	16-Apr-15	Project Lead
Check-in Call	30-Apr-15	Project Lead
Check-in Call	14-May-15	Project Lead
DUA sent to ASTHO and CDC for Review	14-May-15	Project Lead
Check-in Call	28-May-15	Project Lead
CDC/RI Conference Call on DUA Modifications	2-Jun-15	Project Lead/Data Steward
Check-in Call	11-Jun-15	Project Lead
2015 Data Intentions Sent to CDC	15-Jun-15	Project Lead
Check-in Call	25-Jun-15	Project Lead
Received Revised DUA from CDC Legal	30-Jun-15	Project Lead
Call with ASTHO on Travel and DUA questions	30-Jun-15	Project Lead
Submission of Phase I written report	30-Jun-15	Project Lead



Data Acquisition and Creation

Rhode Island is committed to providing the following NCDMs (Table 4) to CDC and the NEPHTN. RIDOH currently holds extracted data from 2000-2013 for hospitalizations and 2005-2013 for ED visits. The NCDMs below are record-level and coded by ICD-9-CM. Data requests from outside the Department will therefore not be necessary allowing the Program to successfully meet all deadlines.

Table 4: RI Data Submission Intentions

ASTHO Tracking Fellowship: Data Intentions		
State	Content Area	Years to Submit
RI	Asthma Hospitalizations	2000-2013
	Heart Attack Hospitalizations	2000-2013
	Carbon Monoxide Hospitalizations	2000-2013
	Heat Stress Hospitalizations	2000-2013
	Asthma Emergency Department Visits	2005-2013
	Carbon Monoxide Emergency Department Visits	2005-2013
	Heat Stress Emergency Department Visits	2005-2013

Travel

In contrast to our original travel submission request, RI will be attending the 2015 Environmental Public Health Tracking Grantee Meeting, to be held on August 25th – 28th in Atlanta, GA. The purpose of this meeting is to provide an opportunity for grant recipients and national partners to meet and discuss current and future projects as well as implementation of the NEPHTN. As a current Tracking Fellow and future Tracking Network applicant, RI is both excited and eager to attend the conference. For our program, this conference will provide an opportunity to speak one-one-one with CDC and grantees on developing their state Networks.

CONCLUSION

Phase I Summary

During the metadata acquisition and creation portion of Phase I, RI experienced technical difficulties with respect to the metadata creation tool. The SAS code for the ED-NCDM shortcut icon was producing the following error message: 'Error: Configuration file "C:\EDNCDM\ED-NCDM.CFG"' is unreadable.' Having read the accompanied User Guide we attempted to make the necessary changes however, the error message did not change. ASTHO and CDC provided us with the contact information for the data file creator (New York) who worked with us until the issue was resolved. The turn-around-time to troubleshoot and resolve this issue was less than 24 hours allowing RI to efficiently continue with the metadata creation process.

Also during Phase I, RI experienced significant down time in the metadata creation window due to an internal issue with the state's hospital payer system. This issue was unexpected and required both data stewards to refocus their time to the immediate concern. To help elevate the data stewards, and continue to meet our Tracking Fellowship goals, the project lead acquired an additional data steward (Megan Towle) to assist with metadata and full data submission. Ms.



Towle serves as the state Epidemiologist for the RI Asthma Control Program and has a vested interest in creating an EPHTN for RI. In addition to her work with hospitalization and ED data for Asthma, Ms. Towle was a part of the TAG and grant planning committee for RI's application for the 2014 CDC EPHTN Grant.

Additionally, the RI Tracking Fellowship Program is interested in working with CDC to submit our NCDM metadata prior to the metadata submission window for a pre-review screening. This will allow RI to review feedback and address any file issues prior to the full submission. RI plans to submit our metadata file to CDC in July for pre-submission review.

In summary RI has had a successful and rewarding experience-completing Phase I of the ASTHO Tracking Fellowship. Bi-weekly check-ins has allowed RI to hear the success and concerns of other state fellows allowing us to learn and grow within our own program. Check-in calls have also been extremely informative in meeting deadlines, training for sharepoint, updates on CDC Tracking events, as well as the opportunity to answer any questions. Specifically, ASTHO Tracking Fellowship staff has been a vital resource between the state fellows and CDC. They have assisted with coordinating Data Use Agreements, answering travel and reporting questions, and provided technical assistance.

Future Plans and Program Sustainability

Beyond contributions to the NEPHTN through ASTHO's Peer-to-Peer Fellowship Program, RIDOH plans to develop, implement, and maintain an EPHTN for the state of Rhode Island. A state network will utilize integrated environmental health data to obtain information in support of activities that improve the health of communities. A RI EPHTN will also advance state and local public health capacity in the area of environmental health surveillance, develop state EPHTN portals, and provide Nationally Consistent Data and Measures (NCDMs) to the National Tracking Network.

Through an EPHTN in RI, RIDOH will work with CDC and data partners to improve existing tracking data and develop new NCDMs that may be adopted by CDC. RIDOH will maintain existing required NCDMs and data flows to CDC and ensure the availability and accessibility of data for development and reporting of these NCDMs on environmental hazards, exposures and health effects, and other jurisdictional priorities.

In addition, Rhode Island has a history of strong regional collaboration with our neighboring states. Through the support of each other's commitment to public health, New England has led the way in public health prevention of disease, morbidity, and mortality. By participating in CDC's NEPHTN Rhode Island will join its fellow northeast Environmental Public Health Tracking Programs making New England the first region in the country to have fully implemented EPHT Programs.