Environmental Information exchange Network

EN2017

Reduce (effort), Reuse (tools), Recycle (people) to Flow Consistent Radon Data

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INNOVATION AND PARTNERSHIP

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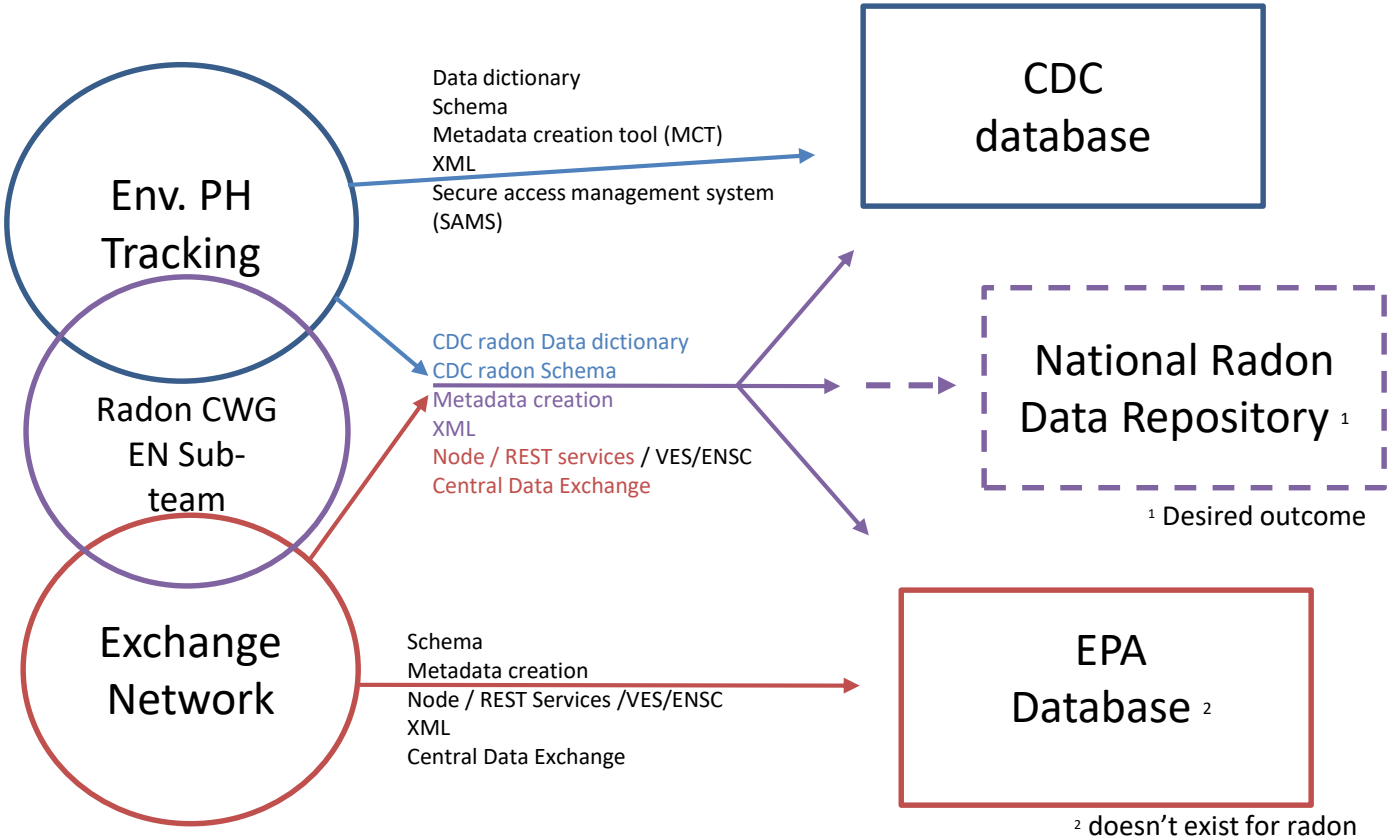
http://www.exchangenetwork.net/en2017

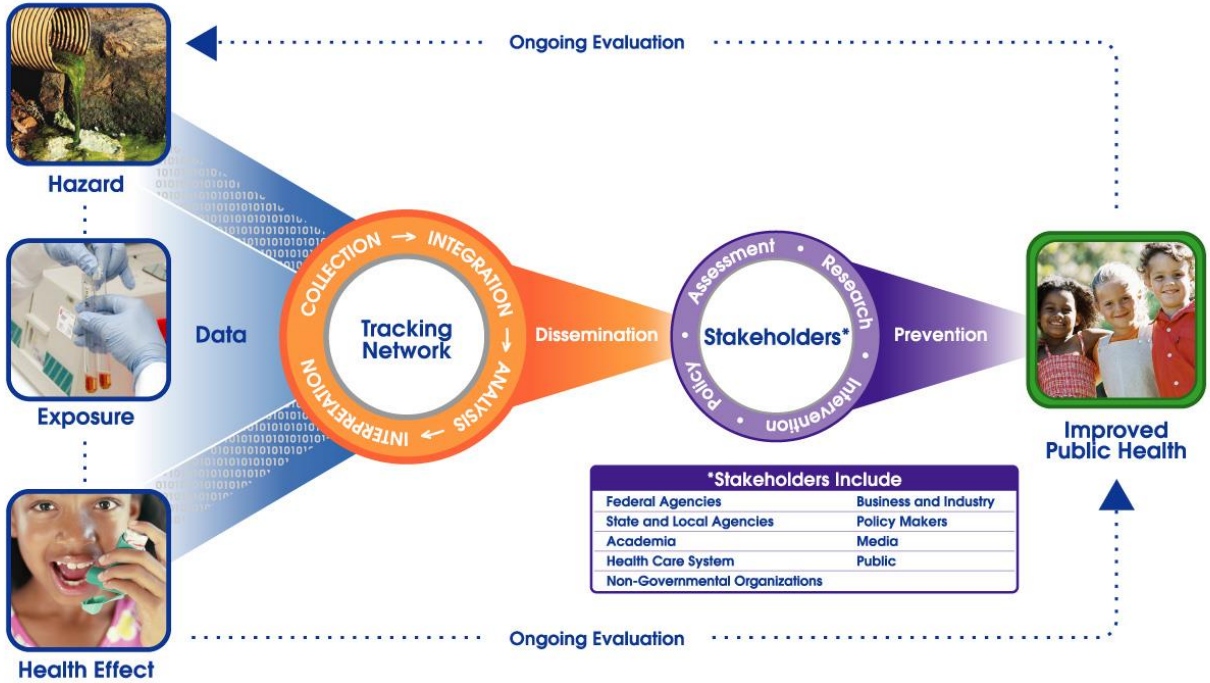
ABSTRACT

Colorado Department of Public Health and Environment (CDPHE) has been developing consistent ways to collect and transfer radon data between private labs, state agencies, and CDC as part of the Environmental Public Health Tracking Radon Content Work Group. During this time a number of other state partners have been involved as well, including New Jersey, Washington and Alaska. New Jersey has previously used the EN Browser to transfer radon data to CDC. Washington and Alaska are developing REST services to perform this task. Colorado and potential partners have begun to look at ways to leverage EPHT and EN resources to flow consistent data efficiently between partners. Partners will continue to develop resources to facilitate sharing their radon data sets via the EN. The resulting resources would be made available as part of reusable services under E-Enterprise for the Environment.

Potential Resource Sharing Diagram



Environmental Public Health Tracking



Department of Health and Human Services
Centers for Disease Control and Prevention
Safer • Healthier • People

CDC
SAFER • HEALTHIER • PEOPLE

CDPHE
COLORADO
Department of Public Health & Environment

National Environmental Public Health Tracking

CDC provides funds to 26 *state and local* health departments to develop local tracking programs.

These programs feed into the *National* Tracking Network.

National Environmental Public Health Tracking

At the CDC, the National Tracking Network facilitates the ongoing collection, integration, analysis, and interpretation of data on a portal about the following factors:

(1)environmental hazards
(2)exposure to environmental hazards
(3)health effects potentially related to exposure to environmental hazards

Why Tracking?

- Quantify the magnitude of a public health problem
- Detect unusual trends in environmental hazards, exposures and health effects
- Identify populations at risk for environmentally related diseases or risk of hazard exposure
- Generate hypotheses about the relationship between health and the environment
- Direct and evaluate control and prevention measures and individual actions
- Facilitate policy development and decision making

Radon Content Work Group (CWG) Goals

1) The Radon CWG is focused on the development of a national database for radon test data.

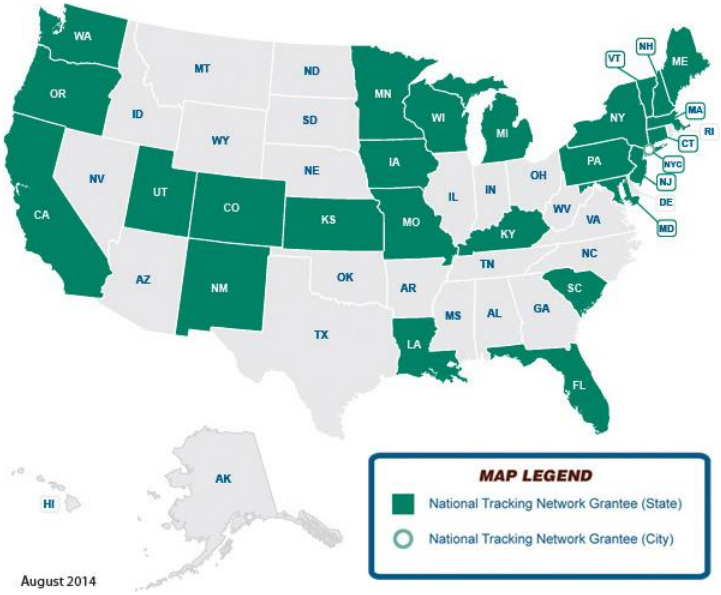
2) The creation of optional radon indicators and measures for display on the Environmental Public Health Tracking national portal.

Radon Content Work Group (CWG)

Exchange Network Sub-team Goals

The Radon EN Sub-team will develop a radon data flow plan to facilitate data exchange via the Exchange Network to Environmental Public Health Tracking (EPHT).

National Environmental Public Health Tracking Network



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EN Sub-team Requirements

1) No preconceived technical solution
states have various solutions already

2) Open to all partners
EN and non-EN, EPHT and non-EPHT

3) Use existing tools where we can
leverage what we have to keep work and costs down.

4) States want easier data sharing
with CDC, EPA and other partners.

EN Sub-team Requirements (Con't.)

5) Tribes' requirements

Are there additional nuances to consider, how do we include and adapt these for our tribal partners?

6) CDC wants to RECEIVE data

They do not PULL data. EPA operates in much the same way.

7) EPA wants a streamlined process to share data

Do not have a radon database currently.

Partners and Perspectives

Alaska has an EN grant to share Radon data. Their technology requirements on their Unix system mean they will need to use a REST API platform to push data out to the Exchange Network.

Partners and Perspectives

Washington has an EN grant to flow radon data and has applied for a challenge grant to work with other states, including non-EPHT states, to develop a radon data sharing solution.

Washington will utilize REST services to flow their data via the Exchange Network.

Partners and Perspectives

Colorado has nearly a decade of EN experience and is ready to share their data.

There may need to be an individual flow configured from each states' node to SAMS. That configuration should be able to be set up at SAMS and shared to EN partners that will configure their Nodes to flow to SAMS via that configuration.

Partners and Perspectives

EPA's interest is looking for a streamlined process to share the data and may be able to help with EN grant funding.

EPA does not have a radon database or a requirement for reporting radon data.

Partners and Perspectives

The EN Browser is a shared tool on the EN for discovering data. It was used in Phase 1 of the Radon Pilot as a no cost solution to sharing NJ data with CDC.

All partners agree, while we are pursuing an Exchange Network solution, the EN Browser is not the solution we would use going forward.

ENSC may be the right interim solution.

Partners and Perspectives

EPA OEI and former Exchange Network coordinator supported our calls adding valuable technical and organizational input.

The evolution of The Exchange Network was illustrated indicating that it started as very prescriptive web services and nodes, where each partner used data standards and standard schemas to share data, especially data required by EPA.

Partners and Perspectives

It was successful but closed off to other partners that did not have nodes like CDC and Tribes. More recently it has developed a broader range of technology.

Partners and Perspectives

Two technologies discussed were the Virtual Exchange Services (VES) which provides for sharing data in the cloud and does not require a Node; and REST services which use APIs.

Some states noted they cannot use VES because they do not feel the data is secure. Some states noted they are choosing REST services and APIs.

Partners and Perspectives

EPA does not have a database for Radon.

EPA will use whatever “public data” CDC makes available and any secure data states agree to share.

CDC will maintain the radon database.

Partners and Perspectives

A number of questions were shared with the group that may help to develop the project's requirements.

The team felt they would benefit from some presentations to better understand some of the tech options.

REST Services and VES were demoed April, 26.

Web Services demo is scheduled late May.

Why We Need to Get the EN & EPHT Together

- Environmental hazards & public health
- Where we live & what environmental hazards could make us sick
- People with environment
- Communities & information
- Scientific data & people who want it
- Decision makers & information
- *Save time and money*

Why We Need to Get the EN & EPHT Together

There is a lot of useful data being transferred between partners for singular uses.

There are duplications of effort across partners when dealing with individual agencies.

Conclusions

Many interested parties

EN tools have already been built

Need to modify the schema for Tracking

We have the resources in place (mostly)

Different technology maybe needed by some (REST / VES)

Missing someplace to send the data to that can receive it (radon database)

Solutions

Continue partnerships that are furthering the schema, plug-in and other technologies.

Build a *test* database to receive the radon data, test schema and services.

Use REST Services / Virtual Exchange Services / ENSC where appropriate.

Contact Info & Questions

Questions?

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Thank you