

SAFE WATCH

SAFE WATER FOR COMMUNITY HEALTH

Safer Well Water through Stronger Public Health Programs

Learn how CDC works with health departments to protect communities from unsafe well water.

Overview of the CDC's Safe Water for Community Health Program

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Centers for Disease Control and Prevention

Private Well Conference

Hartford, CT

April 23, 2019

Today's Presentation

- **Background**

- CDC's Role with Private Wells and Unregulated Drinking Water Systems and Public Health

- **Past work**

- **Safe Water for Community Health Program**

- Accomplishments to Date



Centers for Disease Control and Prevention National Center for Environmental Health

Division of Environmental Health Science and Practice (DEHSP)

- Asthma and Community Health Branch
- Lead Poisoning Prevention and Environmental Health Tracking Branch
- Emergency Management, Radiation, and Chemical Branch
- **Water, Food, and Environmental Health Services Branch**



Water, Food and Environmental Health Services Branch

- Food Safety
- Vessel Sanitation
- Safe Water
- Performance Improvement



CDC's Role

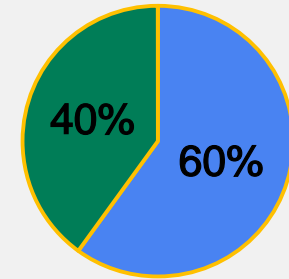
- CDC convened two 2-day workshops
 - State and local public health practitioners
 - East coast and West coast states
- Identified areas of concern for state and locals:
 - Inadequate resources
 - Complacent consumers
 - Lacked technical assistance
- Requested CDC assistance



Unregulated Drinking Water and Public Health



NACCHO 2016 National Profile of Local Health Departments
Population-based programs and services provided directly in the past year (%LHDs)

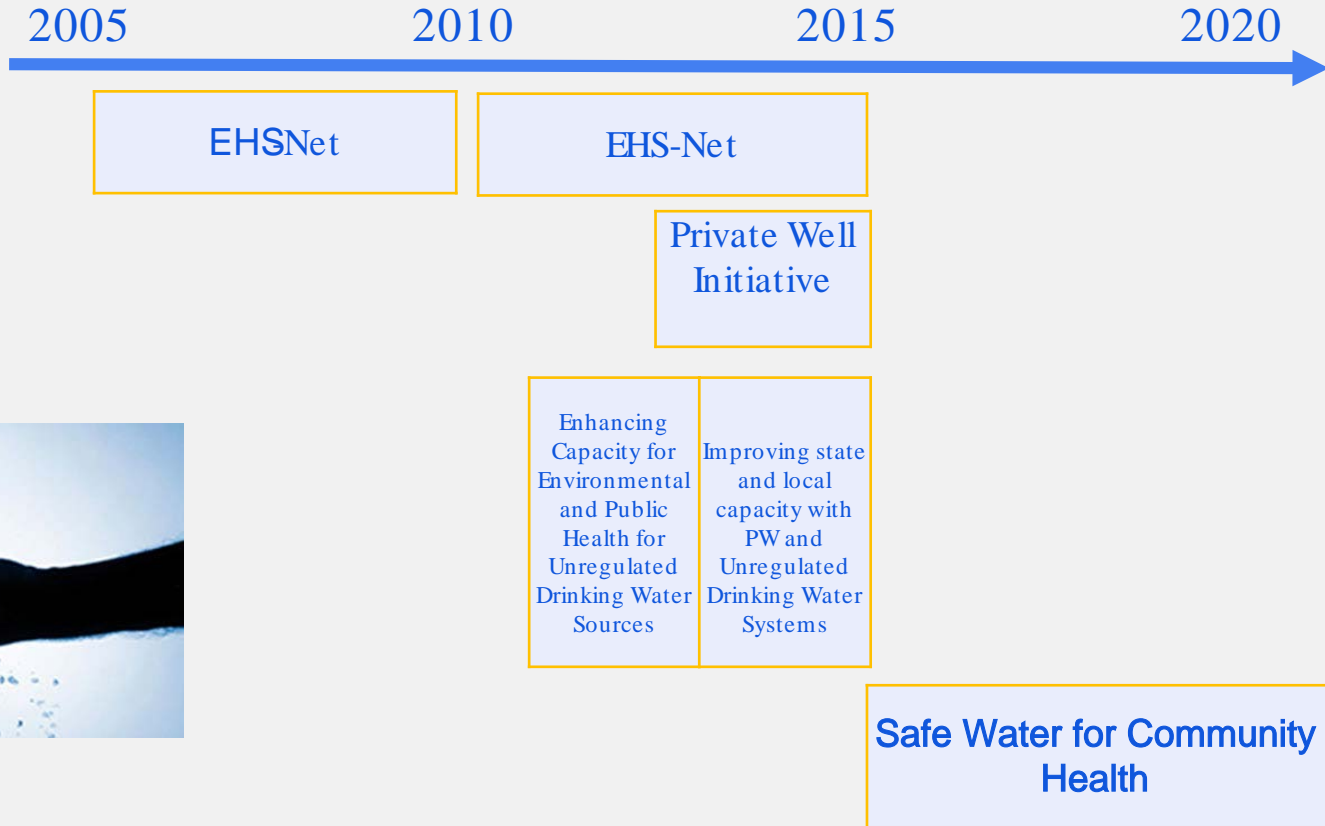


- Safe Drinking Water Act does not regulate systems
 - serve fewer than 25 individuals
 - Less than 15 connections

- LHDs that regulate, inspect or license private drinking water
- LHDs that do not regulate

Background

■ Past Work





10 Essential Environmental Public Health Services

Goal

- Reduce exposures to contaminants from wells and other private water sources
- Identify gaps using the 10 Essential Environmental Public Health Services

<https://www.cdc.gov/nceh/ehs/envphps/docs/envphpsv2.pdf>

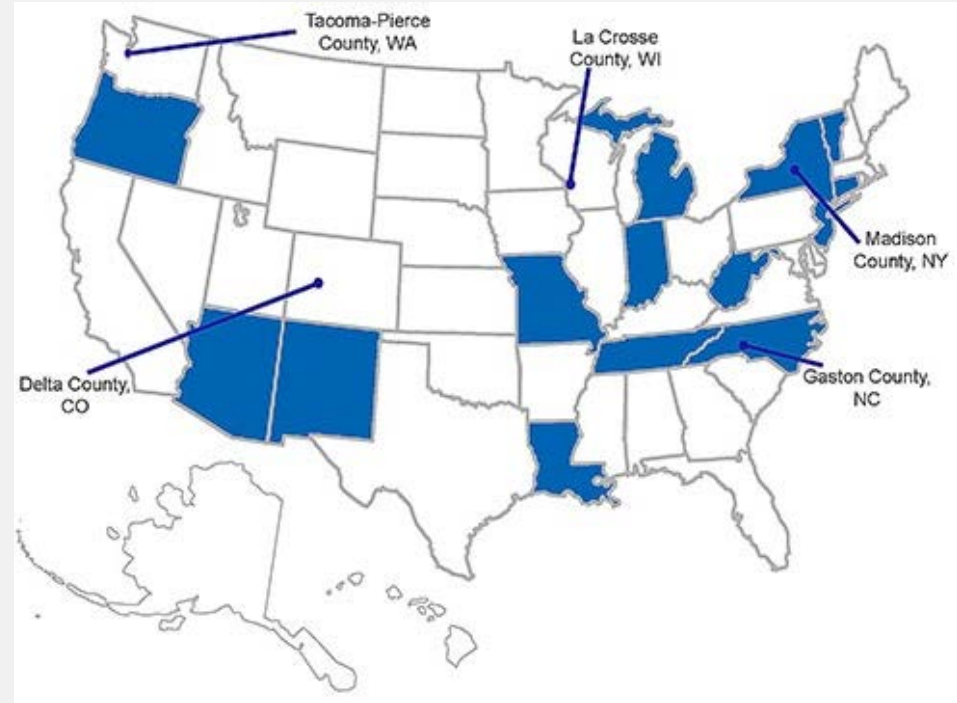
Safe Water for Community Health (Safe WATCH)

State Health Departments

- Arizona Department of Health Services
- Connecticut Department of Public Health
- Indiana State Department of Health
- Louisiana Department of Health and Hospitals
- Michigan Department of Health and Human Services
- Missouri Department of Health and Human Services
- New Jersey Department of Health
- New Mexico Department of Health
- New York State Department of Health
- North Carolina Department of Health and Human Services
- Oregon Health Authority
- Tennessee Department of Health
- Vermont Department of Health
- West Virginia Department of Health and Human Resources

Local Health Departments

- Delta County (CO) Environmental Health
- Gaston County (NC) Department of Health and Human Services
- La Crosse County (WI) Health Department
- Madison County (NY) Health Department
- Tacoma-Pierce County (WA) Health Department

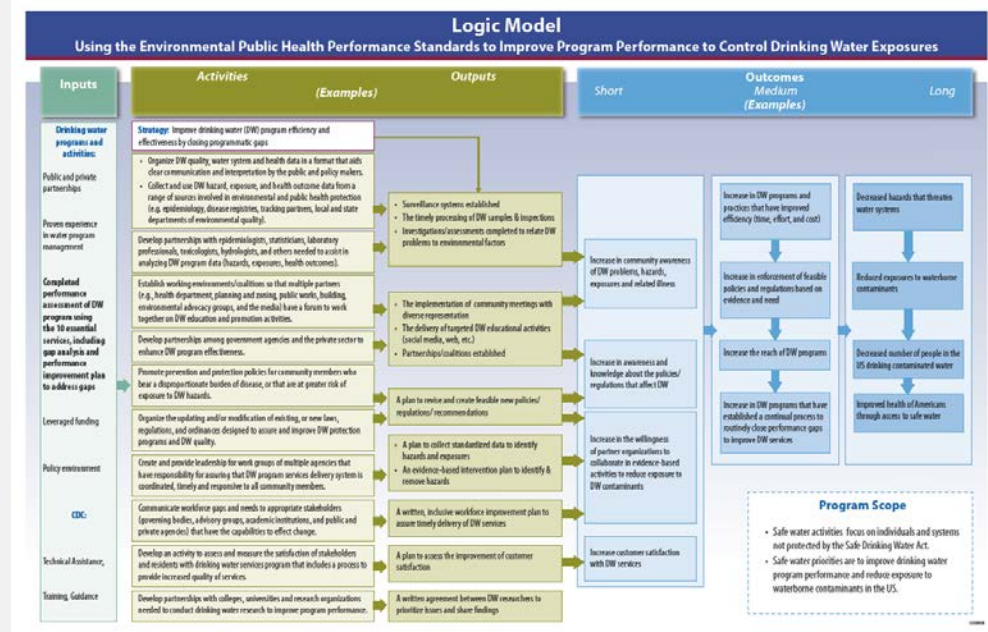


Safe Water for Community Health

Ten Essential Environmental Public Health Services

- Activities based on the Environmental Public Health Performance standards
- Partners designed their own program using the 10 Essential Environmental Public Health Services as the framework

Logic Model

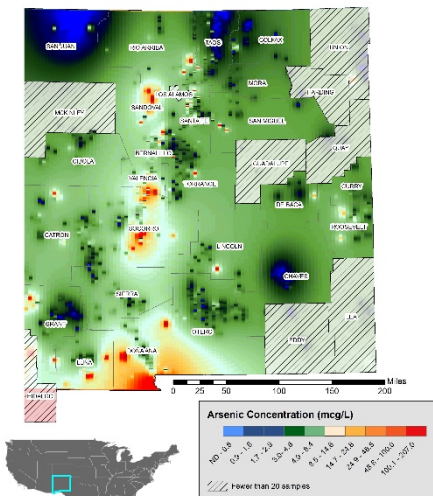


Accomplishments to Date

ES1: **Monitor** environmental and health status to identify and solve community environmental public health problems.

New Mexico Department of Health

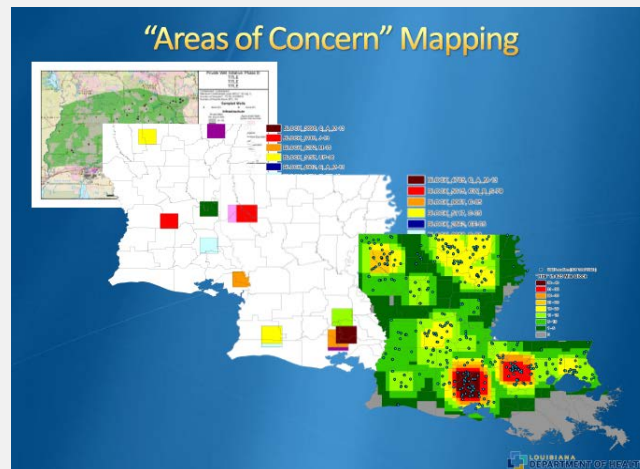
Arsenic Distribution in New Mexico Private Wells
Wells Sampled November 1973 – October 2018
Interpolated* Groundwater Arsenic Concentrations (mcg/L) from Private Wells Data



Data Sources: NMED Water Fairs, NMBGMR, USEPA, USGS NWIS, LISCS NWIS, NMDOH biomonitoring, Bernalillo County, Santa Fe County
*Interpolated Using QGIS 3.4.3 inverse distance weighted.

Last Updated: 1/10/2019

Louisiana Department of Health



http://www.ldh.la.gov/assets/oph/Center-EH/envepi/PWI/Applications/PWI_Web_Mapping_Application.htm

Accomplishments to Date

ES2: **Diagnose and investigate** environmental public health problems and health hazards in the community.

Arizona Department of Health – Well Water Quality

- **Test Your Well**
- **Rules and Regulations**
- **Emergencies**
- **Maintain Your Well**
- **Resources**
 - Labs Certified to Test Drinking Water Samples – English
 - Laboratorios de Arizona Certificados para Tomar Muestras de Agua Potable
 - Nitrates in Arizona Private Wells – English
 - Nitratos en Agua de Pozos Privados en Arizona

<http://www.azdhs.gov/preparedness/epidemiology-disease-control/environmental-toxicology/well-water/index.php>

Top 5 Contaminants in Arizona Groundwater

BACTERIA

Test
Every
Year

NITRATES

Test
Every
Year

ARSENIC

Test
Every 5
Years

FLUORIDE

Test
Every 5
Years

URANIUM

Test
Every 5
Years

Accomplishments to Date

ES3: **Inform, educate, and empower** people about environmental public health issues.

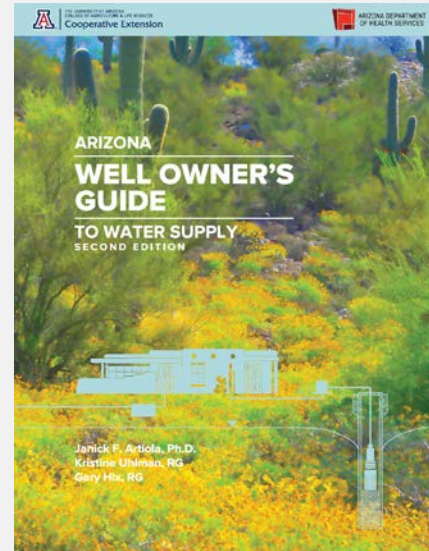
La Crosse County Health Department

- Media campaign—postcards, TV and radio ads, water bottles

<https://www.youtube.com/watch?v=85vBHySCf58>

Arizona Department of Health Services

- Arizona Well Owners Guide



<http://www.azdhs.gov/documents/preparedness/epidemiology-disease-control/environmental-toxicology/well-water/arizona-well-owners-guide.pdf>

Accomplishments to Date

ES4: **Mobilize** community partnerships and actions to identify and solve environmental health problems.

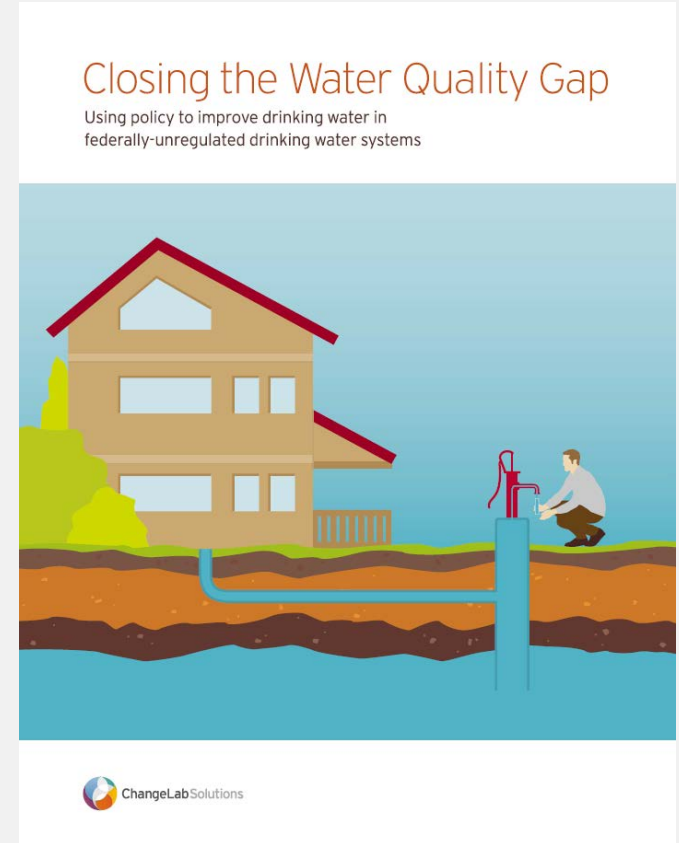
- **Connecticut Department of Health**
 - Private Well Task Force
- **New Jersey Department of Health**
 - Private Well Consortium
- **Madison County Health Department**
 - Individual Water System Workgroup



Accomplishments to Date

ES5: Develop policies and plans that support individual and community environmental public health efforts.

- Technical assistance to grantees on developing policies
- Developed guidance and four case stories as examples



http://www.changelabsolutions.org/sites/default/files/Closing_the-Gap_Water_Regulation-%26-Policies_FACT_SHEET-FINAL_20170725.pdf

Accomplishments to Date

ES6: Enforce laws and regulations that protect environmental public health and ensure safety.

New Mexico Department of Health and Office of the State Engineer

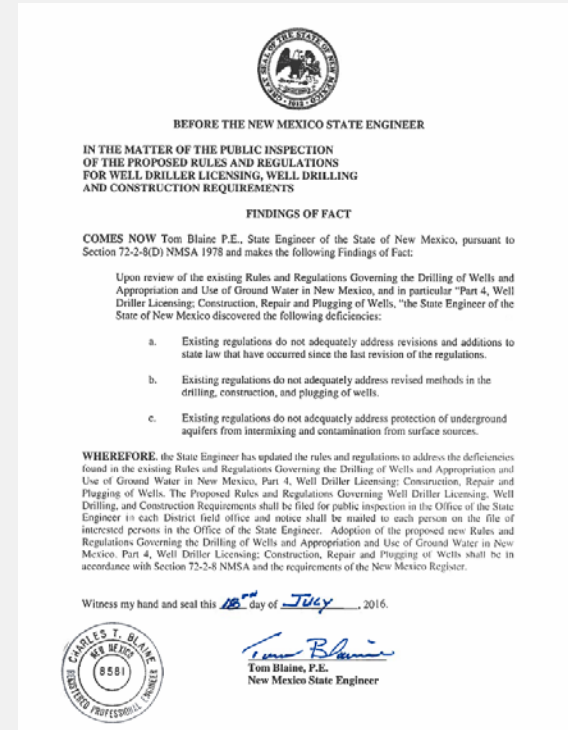
- Changed the Administrative Code in 2016 to tag newly drilled wells. NMDOH will tag older wells.

https://nmtracking.org/environment/water/private_wells/WellIDTag.html

Madison County (NY) Health Department

- Standard testing for individual wells Appendix 75C 10 NYCRR Part 75: Coliform, nitrates, nitrites, turbidity, iron, manganese, hardness, alkalinity, pH and sodium now includes arsenic and lead

<https://regs.health.ny.gov/node/55768>

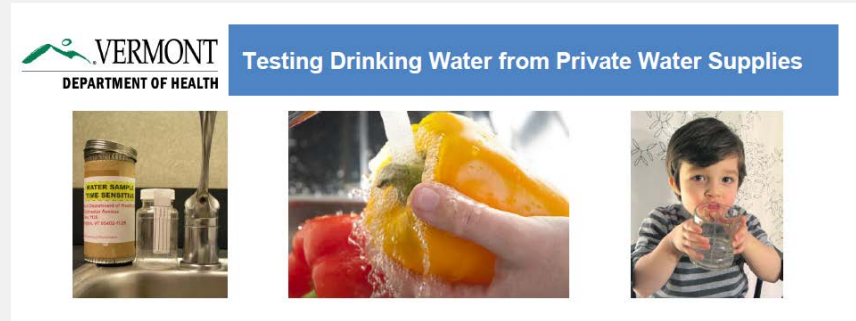


Accomplishments to Date

ES7: Link people to needed environmental public health services and assure the provision of environmental public health services when otherwise unavailable.



Michigan Department of Health
and Human Services



Vermont Department of Health

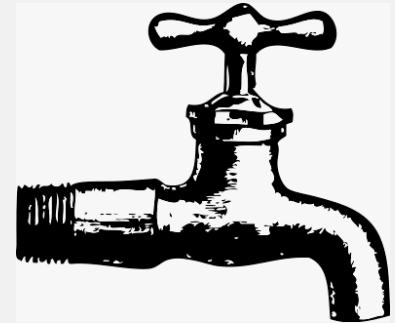
Accomplishments to Date

ES8: **Assure** a competent environmental public health workforce.

Focus on developing a competent workforce for environmental health or related programs that manage UDWSs

La Crosse County Health Department

- Laboratory certification – arsenic, lead
- Vernon County - lab services



Accomplishments to Date

ES9: Evaluate effectiveness, accessibility, and quality of personal and population-based environmental public health services.

- Develop priority activities and their resultant outputs
- Describe how to develop strong process objectives
- Activity + output + timeline
- Describe how to develop output indicators and standards for success

Year 1

- Align Performance Improvement areas with activities and outputs
- Create clear, well-aligned evaluation plan

Year 2-4

- Begin tracking process evaluation indicators
- Begin tracking outcome indicators
- Align outputs with short, intermediate, and long-term objectives

Year 5

- Finish collecting long-term outcome indicators
- Complete a rich, informative evaluation report

Accomplishments to Date

ES10: **Research for new insights and innovative solutions** to environmental public health problem

▪ **New Mexico Department of Health**

- Developed relationship with local university
- Involvement with graduate thesis development and professional research projects

▪ **New Jersey Department of Health**

- Partnerships through the Consortium – stakeholder meeting
- Reducing hazardous drinking water exposures from private wells

▪ **Tacoma-Pierce County Health Department**

- Improve well testing rates – barriers to testing
- Reviewed current fees, application process, staff time

Safe Water for Community Health - Additional Support

- Partnerships through Office of State, Tribal, Local and Territorial Support



Conclusion

- **What is our goal for the future?**

- Recognize the challenges, lessons learned
- Develop framework for state, local, territorial, tribal programs

How to....

<https://www.cdc.gov/nceh/ehs/safe-watch/steps-to-improve.html>

- Private Well Network



Thank You!



For more information, contact NCEH
1-800-CDC-INFO (232-4636)
TTY: 1-888-232-6348 www.cdc.gov
Follow us on Twitter [@CDCEnvironment](https://twitter.com/CDCEnvironment)

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