CSTE Pre-Conference Workshop
Estimating the Probability of Arsenic Occurrence in Private Wells in the U.S.: Collecting, mapping, and applying data

Sunday, June 14, 2015
1 pm to 5 pm:
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Description

Approximately 43 million people (about 14 percent of the U.S. population) rely on domestic wells as their source of drinking water. Unlike community water systems, which are regulated by the Safe Drinking Water Act, there is no comprehensive national program to ensure that the water is tested to ensure that is it safe to drink. A study published in 2009 from the National Water-Quality Assessment Program of the U.S. Geological Survey that assessed water-quality conditions from 2,100 domestic wells within 48 states reported that more than one in five (23 percent) of the sampled wells contained one or more contaminants at a concentration greater than a human-health benchmark. The Health Studies Branch (HSB), National Center for Environmental Health, Centers for Disease Control and Prevention, created a Clean Water for Health Program. The goals of this program are to identify emerging public health issues associated with using private wells for drinking water and begin to develop a plan to address these issues. As part of this program, HSB funded three groups: U.S. Geological Survey (USGS), University of Utah, and Abt,, a private company, to create models to estimate the probability of arsenic occurring at various concentrations in private wells in the U.S. Similar work has been done by public health professionals in Maine and Pennsylvania. The principal investigators from these 5 projects will present their results. Following the presentations, we will hold a panel discussion about lessons learned and recommendations for future work to estimate the probabilities of other contaminants of public health concern (e.g., uranium, nitrates) occurring at various concentrations in private wells in the U.S.

Agenda

1:00 pm – 1:10 pm	Introduction and purpose of the workshop
1:15 pm – 1:40 pm	USGS
1:40 pm – 2:05 pm	University of Utah
2:05 pm – 2:30 pm	Abt
2:30 pm – 2:55 pm	Maine
3:00 pm – 3:30 pm	Break
3:30 pm – 5:00 pm	Discussion

Discussion Questions

1. What are the lessons learned from these activities?

2. What kinds of dissemination products from these activities would be useful?
   a. Maps?

3. What are the next naturally-occurring ground water contaminants that we should consider for future modeling efforts
   a. Possible contaminants include: Iron, selenium, cadmium, magnesium, fluoride, lithium, antimony

4. What are the next naturally-occurring ground water contaminants that we should consider for future estimates of the public health and economic burden via private well water exposure?
   a. Possible contaminants include nitrate, uranium