



Small Drinking Water Systems Project

The CPHA Small Drinking Water Systems Session

Toronto, June 15, 2010

The National Collaborating Centres for Public Health (NCCPH) held a session at the Canadian Public Health Association conference on June 15, 2010 in Toronto with practitioners and policymakers in small drinking water systems. The purpose of the session was to update participants about the activities of the six NCCs, but to also solicit feedback and ideas for future projects.

Approximately 20 participants were in attendance and consisted of medical health officers, public health inspectors, practitioners working with First Nations communities, and students.

A 20-minute update on the collective NCCPH SDWS project was provided by Mona Shum, Manager of the NCCEH and coordinator of the collective project. The presentation is posted on the NCCPH website:

- http://www.nccph.ca/docs/CPHA2010SDWSsession_EN.pdf

Participants were then asked to join round table discussions at one of the six NCC tables for 20 minute intervals, and to visit three tables in total. Each NCC had specific questions pertaining to current, planned, and future projects.

Summary Points from all NCC Round Table Discussion:

Gaps/Problems

- We do not know the burden of illness from small drinking water systems. Are these systems really a problem? Underreporting is a problem.
- There may be gaps in oversight of small systems due to the fact that legislation differs in each province and various agencies may be responsible for small systems of varying sizes. It is difficult to connect environment, public health, and municipal authorities; their responsibilities, oversight, guidelines, etc. are diverse and fragmented.
- Some potentially waterborne diseases are reportable in many provinces, but different provinces have their own case definitions and reporting criteria.
- We need more connections between: different regions/MOHs, on vs off-reserve, First Nations and neighbouring communities. This is especially important for very small systems (e.g., <14 connections).
- A common problem is that rural communities have declining or small tax bases and little money to start doing anything. Often there are hygienic systems, but are non-potable.
- Risk communication is an issue - making people aware of possible waterborne disease from pathogens vs. chemicals, communicating what is often thought of as foodborne illness can be waterborne.

Activities suggested by participants

- Look into including private wells in the scope of the NCCPH project.
- Look at Ontario as case example of improvements after Walkerton. In Ontario, with its new Safe Drinking Water Act there is more responsibility for public health, guidelines for adverse water conditions, templates for boil water advisories, and testing of chemicals, sodium, total coliform, E. coli.
- Gather information on the burden of illness of waterborne disease and include the setting and other contributing factors.
- Use a case study of a municipal-level intervention or policy change in order to document how change was brought about.
- Hold a deliberative dialogue to bring together multiple sectors. It would be interesting to bring together different sectors with overlapping areas of responsibility, in order to discuss standards across their jurisdictions and identify gaps.
- Analyze the jurisdictional gaps, by looking at responsible agencies and ministries, standards, and size of system (number of connections).
- Synthesize different nitrate standards across Canada and internationally.
- Gather information to assess whether boil water advisories are effective in response to low pressure events, e.g., What is the actual risk? What are the characteristics of events that increase risks? When is the BWA justified?
 - Gather Health Authority tools for dealing with low pressure events, assessing effectiveness of tools, and risk communication.
 - Produce model fact sheets and responses (boil water advisory vs drinking water advisory – which is needed when?)
- Review new technologies for treatment. Provide a service like Consumer Reports for water treatment technologies– what works? Is there certification?
- Compile a list of accurate and low cost testing kits.

Suggested dissemination activities for NCCs

- Link to New Zealand resources. New Zealand has a number of good SDWS experiences. One example relates to the way in which consistent standards were implemented, following legislation. Apparently, there are a number of resources online at the New Zealand Ministry of Health website. NZ has also implemented a capital assistance program for upgrading systems (funding access dependent upon an inspection process).
- Disseminate information to public health inspectors through their training and update their programs.
- Share lessons learned in story form.
- Use circuit riders to disseminate legislation information to First Nations communities.
- Gather risk communication tools for practitioners 1) to help people recognize water as a potential source of illness, 2) to inform people that often what is thought to be foodborne illness can actually be waterborne, 3) inform people about boil water advisories, boil water orders, etc.
- Inform practitioners about the need to include questions about water in disease surveillance (eg., at physician visits).

For more information on this project, please visit

www.nccph.ca