

Executive Summary

In 2005-06, the National Collaborating Centre for Environmental Health (NCCEH) conducted an assessment of needs, gaps, and opportunities related to synthesizing, translating, and exchanging knowledge (KSTE) for policy and practice in environmental health (EH). The purpose of the study was to facilitate development of a work plan for our first three years of operation.

Key objectives were to:

- identify EH services and programs delivered through public health in Canada;
- identify available EH KSTE products, materials, and activities;
- examine past experience in EH KSTE;
- identify needed EH KSTE products, materials, and activities;
- identify gaps between what is needed and what is available;
- identify opportunities for bridging the gaps; and
- identify potential priorities for the NCCEH.

The study involved an environmental scan, including interviews with key informants, an online survey, and a literature and website search. This was followed by a needs, gaps, and opportunities assessment.

Sixty-five practitioners and policymakers from 38 agencies that deliver EH services and programs were interviewed. Twenty-two researchers active in EH research were also interviewed. Thirty people responded to the survey. In addition, discussions were held with representatives from Canadian organizations that include practitioners and policymakers or provide training for public health inspectors.

Key findings of the study included:

- A wide variety of EH services and programs are delivered, and these vary between and within provinces and territories. Agencies both within and outside the public health system are involved.
- The amount of staff time allocated to delivering services and programs varies between and within provinces and territories.
- A number of additional services and programs for delivery were identified by participants.
- Limited evidence was cited for effectiveness of delivery of current services and programs.
- The research knowledge base for current services and programs was inadequate for most participants.
- There is relatively little KSTE activity in EH. EH lags behind public health, and public health falls behind the acute care sector.

The following two sets of overlapping needs became clear. Those related to EH service and program delivery include:

- a shortage of people with *advanced training in EH* which prevents delivery of additional services/programs;
- a lack of *evaluation* which results in scant evidence of effectiveness for current service/program delivery;
- an inadequate *research knowledge base* for current services and programs; and
- an absence of *surveillance of environmental exposures and risk factors* which is a more fundamental problem; without it, not only is evaluation of effectiveness compromised, but EH cannot accurately set risk-based priorities or targets.

The needs related to EH KSTE and the NCCEH include:

- evaluation of effectiveness of service/program delivery;
- capacity to access, assess, and review scientific studies;

- scientific studies relevant to policy and practice;
- easily accessible information on current EH research/practice/policy, and on EH KSTE products;
- specific EH KSTE products; and
- the establishment of the NCCEH itself.

In the absence of these, the use of scientific studies in developing EH policy and practice is hindered.

Given the needs stated above and what is actually available in EH KSTE, it is clear that significant gaps exist. There are major opportunities for the NCCEH to bridge those gaps, and by doing so, address the overarching need to improve the effectiveness of environmental health service and program delivery in Canada.

In response to recommendations from participants, initial plans for the NCCEH include:

- producing documents such as reviews of evidence and evidence-based practices;
- monitoring and exchanging information about current policy, practice, and research;
- establishing secondments/interchanges and practica;
- developing courses and summer institutes;
- matching practitioners/policymakers and researchers; and
- evaluating the work of the NCCEH.

Based in part on the environmental scan, the NCCEH selected drinking water as a risk factor for human illness as its first major project. We are in the process of selecting other topics for a number of minor projects.

The NCCEH will collaborate with practitioners, policymakers, and researchers throughout its projects. For the major ones, a steering committee including representation from this user group will also be set up.

The plan is intended to reflect the priorities of EH practitioners and policymakers, and to build a national network of practitioners/policymakers and researchers for collaboration. The ultimate goal is to improve public health.