

NURSES AND ENVIRONMENTAL HEALTH

CNA POSITION

The environment is an important determinant of health and has a profound impact on why some people are healthy and others are not.¹

The Canadian Nurses Association (CNA) *Code of Ethics for Registered Nurses* supports registered nurses' engagement in environmental health issues as part of their work for social justice. The code suggests that as part of ethical practice, registered nurses may undertake the ethical endeavours of "supporting environmental preservation and restoration and advocating for initiatives that reduce environmentally harmful practices in order to promote health and well-being" and "maintaining awareness of broader global health concerns such as...environmental pollution."²

Canadians trust nurses³ and value their expertise.⁴ CNA believes that the public expects nurses to be aware of and know how to promote Canadians' health in the context of environmental health issues. This is accomplished through nurses' roles in clinical practice, education, research, administration and policy. Given that some populations "are more vulnerable to environmental risks as a result of physical differences, behaviours, location and/or control over their environment," nurses must be particularly strong advocates for these populations.⁵

The role of nurses in environmental health includes:

- assessing and communicating risks of environmental hazards to individuals, families and communities;
- advocating for policies that protect health by preventing exposure to those hazards and promoting sustainability; and
- producing nursing science, including interdisciplinary research, related to environmental health issues.

Understanding and applying environmental health principles should be a part of every nurse's practice. Still, many nurses do not feel adequately prepared to engage in policy issues related to environmental health.⁶ CNA values the work that nurse leaders, educators and students are doing to integrate and bolster nursing knowledge and skills related to environmental health, and advocates for continued inclusion of environmental health concepts in basic and continuing nursing education, strengthened where necessary and taught in both academic and workplace settings. Rather than taught as a specialized area of practice, environmental health can be integrated into all areas of nursing practice.

¹ This position statement does not address health-care work environments. For positions on this topic, please see *Joint CNA/CFNU Position Statement on Practice Environments: Maximizing Client, Nurse and System Outcomes*, 2006.

² (Canadian Nurses Association [CNA], 2008a, pp. 20-21)

³ Unless otherwise stated, *nurse* or *nursing* refers to any member of a *regulated* nursing category, i.e., a registered nurse, licensed/registered practical nurse, registered psychiatric nurse or nurse practitioner. This definition reflects the current situation in Canada whereby nurses are deployed in a variety of collaborative arrangements to provide care.

⁴ (EKOS, 2007)

⁵ (Health Canada, 2008)

⁶ (CNA, 2008b)

Nurses are valuable contributors as principal investigators and as co-investigators in interdisciplinary environmental health research. Their increased participation in nursing science related to environmental health issues supports all areas of nursing practice and ensures that nursing perspectives are incorporated.

Human health depends on the health of the environment, and CNA values actions that prevent or reduce harm to the environment. CNA expects that as nurses become more aware of environmental health issues, they will increasingly focus on reducing the environmental impact of the health setting in which they work and of their personal activities, and thus promote environmental sustainability.

CNA endorses the use of the *precautionary principle* as a fundamental tenet of practices that affect the environment. The precautionary principle proposes that “where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation.”⁷

Protecting human health and preventing disease and death must be the first priority for environmental legislation and regulations. All levels of government in Canada have a responsibility to manage environmental hazards through various governance instruments. Nurses and nursing organizations must work with governments to improve environmental policy and to advocate for healthy public policies.

Finally, CNA believes that intersectoral and interdisciplinary collaboration, within and outside of the health system, is crucial to nurses’ work in environmental health.

BACKGROUND

In 2004, the World Health Organization (WHO) defined environmental health as addressing “those aspects of human health, including quality of life, that are determined by physical, chemical, biological, social, and psychosocial factors in the environment. It also refers to the theory and practice of assessing, correcting, controlling, and preventing those factors in the environment that can potentially affect adversely the health of present and future generations.”⁸

WHO has recently revised this definition; however, the earlier definition is useful in guiding nursing practice in environmental health because it includes determinants of health that nurses already routinely address (biological, social and psychosocial factors, including income inequity) and adds others they may not (physical and chemical factors). Its use supports the view that addressing environmental health enhances work in which nurses are already engaged, rather than introducing a new specialty area. It also provides specific guidance for areas of nursing intervention (assessing, correcting, controlling and preventing) that are part of theories and conceptual frameworks used by nurses.

The connections between health and the environment, including air, water and food quality, are well known. Canadians’ health is affected by poor outdoor air quality (resulting in increases in mortality and morbidity from both cardiovascular and respiratory diseases), chemicals (implicated as a cause of cancer, endocrine disruption, reproductive toxicity and neurotoxicity, among other health effects)⁹ and toxic waste. More recently, our understanding has broadened to include other environmental influences on health such as housing quality, waste disposal, road safety and noise.¹⁰ Canada has also felt the effects of global threats to health, such as ozone depletion, air pollution and soil erosion. Climate change has affected the health of Canadians through increases in exposure to vector-borne disease (such as West Nile virus infection), higher incidence of water- and food-borne illnesses, more frequent extreme weather events and severe heat

⁷ (United Nations, 1992)

⁸ (World Health Organization, 2004)

⁹ (Wigle, 2003)

¹⁰ (Myres & Betke, 2002)



waves.¹¹ Workplaces can also be a source of significant environmental exposure, through biological, chemical, radiological or physical hazards that affect indoor air and the health of workers.¹²

Nurses are uniquely qualified to bring information to the public on protection from environmental exposures. They have the assessment skills and scientific background to identify potential hazards, and the communication skills to explain the exposure, and how to reduce its risk, in an understandable way.

Nurses have a history of advocating for patients and for other issues of public policy such as women's suffrage, sanitation, birth control and women's rights;¹³ they have recently advocated for environmental health issues such as regulations restricting pesticide and tobacco use.¹⁴ Other issues nurses are currently involved with are climate change, through advocating for clean air regulations, and environmental social justice, through addressing disparities in wealth among nations. Nurses are also taking action at work and in their personal lives by reducing greenhouse gas emissions and wastes; using, and encouraging others to use, less toxic products; increasing the use of reusable and recyclable products; and moving away from consumerism toward an understanding of the impact that our resource use and waste production has on global well-being.

Nursing education, including basic and continuing education, enables nurses to consider environmental factors that may be contributing to poor health; understand environmental hazards and their impact on health; understand the role of individuals and communities in providing good stewardship of the environment; make recommendations about how to reduce or prevent exposures to environmental hazards; and conduct research on environmental health issues.

Nursing research in environmental health focuses on identifying environmental exposures that pose a risk to human health, and evaluating the effectiveness of nursing interventions designed to reduce their impact; this involves assessing which populations are most vulnerable to what exposures, and which strategies are most effective in reducing their risk.

WHO has calculated that the impact of environmental hazards on health is heaviest among poor and vulnerable populations in developing countries. Within developed countries, vulnerable populations, including families living in poverty, migrant workers and visible minority groups, are more likely to be exposed to environmental hazards at home, in their community and at work.¹⁵ In addition, children, wherever they live, are especially vulnerable "because they have no control over their prenatal and postnatal environments, including the quality of the air they breathe, the water they drink, the food they eat, and their place of residence."¹⁶ In Canada, residents of First Nations communities are particularly at risk of health problems related to unsafe drinking water, lack of adequate sanitation and substandard housing.¹⁷ Northern Inuit are also affected significantly.

The *Canadian Environmental Protection Act* employs the precautionary principle and other environmental protection principles.¹⁸ Although the precautionary principle was developed to protect the environment, it can also be used to guide health protection activities. For nurses, applying the precautionary principle means that risk reduction activities with individuals, families and communities should focus on minimizing exposures to environmental hazards through

¹¹ (Health Canada, 2005)

¹² (Guenther & Hall, 2007)

¹³ (Lewenson, 2006)

¹⁴ (Registered Nurses' Association of Ontario, 2006; 2007)

¹⁵ (Prüss-Üstün & Corvalán, 2006)

¹⁶ (Wigle, 2003)

¹⁷ (Health Canada, 2000)

¹⁸ (Government of Canada, 1999)

advocacy, risk communication and recognized occupational and public safety controls, even where there is not scientific certainty of the harmful health effects of exposure.

Associations in Canada and the United States have developed environmental health principles for nurses. The American Public Health Association released a set of principles for public health nurses; the Canadian Occupational Health Nurses Association has standards for the occupational health nurse on their website that address environmental health; and the American Nurses Association has environmental health principles for nurses.¹⁹

Approved by the CNA Board of Directors

Published July 2009

References:

American Nurses Association. (2007). *ANA's principles of environmental health for nursing practice with implementation strategies*. Washington, D.C.: Author.

American Public Health Association. (2005). *Environmental health principles for public health nursing*. Washington, D.C.: Author.

Canadian Nurses Association. (2008a). *Code of ethics for registered nurses*. Ottawa: Author.

Canadian Nurses Association. (2008b). *Nurses and environmental health: Survey results*. Ottawa: Author.

Canadian Occupational Health Nurses Association. (2003). *Occupational health nursing practice standards*. Toronto: Author. Retrieved November 30, 2008, from www.cohna-aciist.ca/pages/content.asp?catid=10&catsubid=5

EKOS. (2007). *Public views of environmental health issues and nursing: A qualitative study*. Unpublished paper prepared for CNA.

Government of Canada. (1999). *Canadian Environmental Protection Act*. Ottawa: Minister of Justice. Retrieved January 22, 2009, from <http://laws.justice.gc.ca/en/C-15.31/>

Guenther, R., & Hall, A. G. (2007, May 31). Healthy buildings: Impact on nurses and nursing practice. *OJIN: The Online Journal of Issues in Nursing* 12(2). Available at www.nursingworld.org/ojin

Health Canada. (2000). *A statistical profile on the health of First Nations in Canada*. Ottawa: Author. Retrieved June 12, 2007, from http://www.hc-sc.gc.ca/fnih-spni/pubs/gen/stats_profil_e.html

Health Canada. (2005). *Your health and a changing climate: Information for health professionals*. Ottawa: Health Canada.

Health Canada. (2008). *Vulnerable populations*. Retrieved November 30, 2008, from www.hc-sc.gc.ca/ewh-semt/contaminants/vulnerable/index-eng.php

Lewenson, S. B. (2006). A historical perspective on policy, politics and nursing. In D. J. Mason, J. K. Leavitt & M. W. Chaffee (Eds.), *Policy and politics in nursing and health care* (pp. 21-33). St. Louis: W. B. Saunders.

Myres, A., & Betke, K. (2002). Healthy environments = Healthy people. *Health Policy Research Bulletin*, 4, 5-8. Ottawa: Health Canada.

¹⁹ (American Nurses Association, 2007; American Public Health Association, 2005; Canadian Occupational Health Nurses Association, 2003)



Prüss-Üstün, A., & Corvalán, C. (2006). *Preventing disease through healthy environments: Towards an estimate of the environmental burden of disease*. Geneva: World Health Organization.

Registered Nurses' Association of Ontario [RNAO]. (2006). *Action on tobacco control: Action kit for RNs*. Retrieved November 30, 2008, from www.rnao.org/Storage.asp?StorageID=637

RNAO. (2007). *Creating a healthier society: RNAO's challenge to Ontario's political parties; Building medicare's next stage, focusing on prevention*. Retrieved July 24, 2007, from www.rnao.org/Storage/29/2398_RNAO_Election_Platform_2007.pdf

United Nations. (1992). *Rio declaration on environment and development* (principle 15). Rio de Janeiro: United Nations Conference on Environment and Development, June 3-14. Retrieved July 24, 2007, from www.unep.org/Documents.Multilingual/Default.asp?DocumentID=78&ArticleID=1163

Wigle, D. (2003). *Child health and the environment*. New York: Oxford University Press.

World Health Organization. (2004). *Protection of the human environment*. Retrieved June 12, 2007, from www.who.int/phe/en, as quoted in Frumkin, H. (2005). *Environmental health: From global to local*. New York: John Wiley and Sons.

Also see:

Related CNA position statement:

Climate Change and Health (2009)

Joint position statement with the Canadian Medical Association:

Environmentally Responsible Activity in the Health-Care Sector (2009)

Related CNA publications:

The Environment and Health: An Introduction for Nurses (2008)

The Role of Nurses in Greening the Health System (2008)

The Role of Nurses in Addressing Climate Change (2008)

Related International Council of Nurses publications:

Reducing Environmental and Lifestyle Related Health Hazards (2007)

Nurses, Climate Change and Health (2008)

Replaces:

The Environment is a Determinant of Health (2000)

