450 Rogers, Hons

- 6 Roberts M., Reich M. Ethical analysis in public health. Lancet 2002;359:1055-9
- Kass N. An ethics framework for public health. Am J Public Health 2001;**91**:1776-82
- Mullan F. Don Quixote, Machiavelli and Robin Hood: public health practice past, present and future. Am J Public Health 2000;90:702-7
- Horner JS. For debate: the virtuous public health physician. J Public Health Med 2000:22:48-53.
- 10 Beauchamp D. Community: The neglected tradition of public health. In: Beauchamp D, Steinbock B, eds. New ethics for the public's health. New York: Oxford University Press, 1999.
- 11 Mooney G. "Communitarian claims" as an ethical basis for allocating health care resources. Soc Sci Med 1998;47:1171-80.
- 12 Mann JM. Medicine and public health, ethics and human rights. Hastings Cent Rep 1997:27:6-13
- 13 Rodriguez-Garcia R, Akhter M. Human rights: the foundation of public health practice. Am J Public Health 2000;90:693–4.

- 14 Sulmasy D, Sugarman J. The many methods of medical ethics. In: Sugarman J, Sulmasy D, eds. Methods in medical ethics. Washington: Georgetown University Press, 2001.
- 15 Pope C, Ziebland S, Mays N. Qualitative research in health care. BMJ 2000;320:114-16.
- 16 Malterud K. Qualitative research: standards, challenges, and guidelines Igncet 2001:358:483-8
- 17 Kassell J, Young A. Why we should not seek individual informed consent for participation in health services research. J Med Ethics 2002;28:313–17.
- 18 Weed D, McKeown R. Epidemiology and virtue ethics. Int J Epidemiol 1998;**27**:343-9
- 19 Highland NHS Board. Ethical decision making: a framework for ethical overnance. Inverness: Highland NHS Board, 2002.
- 20 Multiple authors. Series of articles on relationships with the pharmaceutical
- industry. BMJ 2003;326:1155–210.

 21 Kessel A. Public health ethics: teaching survey and critical review. Soc Sci Med 2003;56:1439-45.

SPEAKER'S CORNER.....

Public health practitioners can learn from the weather forecasters

n Canada there is a Weather Network channel on the television that provides weather related information 24 hours a day, 7 days a week. This information is also available on the web site.1 I hope there will be a television channel for disseminating public health information to the general public in a similar way.

Firstly, public health practitioners can design universal non-word symbols to denote public health events. This is similar to, for example, the picture of a sun, a sun partly covered by clouds, or clouds with snow flakes, which can be easily understood by people speaking different languages.

Secondly, we can provide public health short range and long range forecasts on a number of important indicators. For example, on the weather channel there are local forecasts for this afternoon (temperature, sunny/cloudy, wind, pressure, relative humidity); conditions this evening, overnight and morning; seven day outlook; and long range forecast.

Thirdly, we can use colour coded maps to denote public health situations and predictions in space and time. For example the Weather Network uses the following colour codes for warnings: heavy snow fall (grey), blizzard (white), blowing snow (light green), wind (yellow), freezing rain (light red), heavy rainfall (green), winter storm (red), wind chill (blue).

Fourthly, regular broadcast can be interrupted by "Public Health Alert". For example, "Meteorological Alert" is a severe weather bulletin issued by Environment Canada, with warnings on a bright red background.

Fifthly, information that is relevant and used by the public can be disseminated. Information dissemination should be "user pull" rather than "provider push". For example, the following information is presented in winter on the Weather Network: highway conditions (amount of rain and snow), ski conditions (number of runs open, and snow depth), sunshine getaways (weather conditions in warm resort areas).

Sixthly, information should be presented in an interesting way. For example, today's Weather News is "St John's, Newfoundland, is expected to have 40 cm of snow this evening." Weather Facts is "it was on this day 35 years ago ...". Weather Quiz is "the coldest capital yesterday was—

- (A) Fredericton NB, (B) Toronto ON, (C) Winnipeg MN,
- (D) Edmonton AB?" The answer: "(A) -23 degrees celsius,

(B) -20, (C) -36, (D) -20". Seventhly, information should be translated to the level

understood by the public. For example, a low pressure system is interpreted by the broadcaster "in other words, a weather bomb", wind chill is explained by "with the wind it feels like", and it is further explained "wind chills of -40 to -50degrees celsius means exposed skin freezes in less than 10 minutes".

Eighthly, education and training can be provided for the public. For example, today's Weather Wise teaches about "what is an isobar?", "how does a snowflake form?", and "why does the Alberta Clipper dump a lot of snow on the East Coast of Canada?"

The basic question before putting in place a public health channel is, how can we sufficiently market public health to the general public so that people will be more concerned about their own health tomorrow than whether it is going to rain or snow tomorrow?

Population and Public Health Branch, Health Canada, AL no 6701A, 120 Colonnade Road, Ottawa, Ontario K1A 1B4, Canada; Department of Public Health Sciences, University of Toronto; Department of Epidemiology and Community Medicine, University of Ottawa, Canada; Bernard_Choi@hc-sc.gc.ca doi: 10.1136/jech.2004.020404

Reference

The Weather Network. http://www.theweathernetwork.com/ (accessed on 26 Jan 2004)