Review of pneumococcal vaccination programs across Canada

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A 23-valent pneumococcal vaccine has been licensed in Canada since 1983. Beginning in 1989, the Canadian National Advisory Committee on Immunization (NACI) recommended that the vaccine be given to all persons 65 years of age or older, and those with selected underlying chronic diseases and health conditions (1). Currently, NACI recommends the pneumococcal vaccine for all persons 65 years of age and older, as well as persons over two years of age with asplenia, splenic dysfunction or sickle-cell disease. The vaccine is also recommended for persons over two years of age with the following conditions: chronic cardiorespiratory disease (except asthma), cirrhosis, alcoholism, chronic renal disease, nephrotic syndrome, diabetes mellitus, chronic cerebrospinal fluid leak, human immunodeficiency virus (HIV) infection, and other conditions associated with immunosuppression (Hodgkin's disease, lymphoma, multiple myeloma, induced immunosuppression for organ transplantation) (2).

Despite recommendations by NACI for pneumococcal vaccination among high risk groups, some provinces and territories have not provided publicly funded vaccine to their inhabitants. To determine the current status of pneumococcal disease control activities across the country, a survey was conducted by the Bureau of Infectious Diseases, Division of Respiratory Diseases, in June 1997 and January 1998. Individuals from provincial and territorial ministries of health were questioned regarding the current status of pneumococcal immunization programs, anticipated program changes and barriers to their development, as well as current and future plans for surveillance of invasive pneumococcal infections. Every province and territory responded to both surveys.

As of January 1998, 11 of the 12 provinces and territories had some form of publicly funded pneumococcal immunization program. However, differences exist between what individual provinces and territories include in these programs. One province and the two territories include all risk groups as defined by NACI, including healthy individuals 65 years of age and older. Three other provinces include all high risk groups except for healthy persons 65 years of age and older. Two provinces include only some of the high risk groups, and one province offers vaccine only to individuals over 65 years of age. In addition, two provinces primarily target persons in long term care facilities. Four provinces, including the one that does not currently have a publicly funded pneumococcal immunization program, are anticipating major program expansion in 1998.

In the 11 provinces and territories with pneumococcal immunization programs, the vaccine is administered by both public health and private physicians. In seven of the provinces and territories, both groups give the vaccine. In one province and one of the territories, public health is solely responsible for vaccine delivery, and, in two other provinces, it is exclusively the responsibility of private physicians.

In the provinces where all high risk groups are not currently covered by publicly funded pneumococcal immunization programs, three stated that cost was the major deterrent. Only one province considered pneumococcal disease a low priority. In two provinces, proposals had been put forth for pneumococcal immunization programs; however, they had yet to be accepted. No province or territory identified vaccine effectiveness or cost effectiveness as a barrier.

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Nationally, information on pneumococcal meningitis is published in the *Notifiable Diseases Annual Summary* (3); however, only 10 provinces and territories collect and submit these data. In seven jurisdictions, this surveillance activity is limited to pneumococcal meningitis. In two of the provinces and one territory, surveillance also includes pneumococcal bacteremia. Two provinces plan to expand surveillance in the future to include all invasive pneumococcal disease.

Changes are occurring in Canada with regard to the priority given for surveillance and prevention of pneumococcal infections, particularly among the elderly. As pneumococcal vaccine

programs develop across Canada, more work will need to be done to monitor vaccine uptake by the targeted groups and define the effectiveness of the programs in reaching persons at risk.

REFERENCES

1. Health Canada. Canadian Immunization Guide, 3rd edn. Ottawa: Minister of Supply and Services, 1989:85-8.
2. Health Canada. Canadian Immunization Guide, 5th edn. Ottawa: Minister of Public Works and Government Services Canada, 1998:140-3.
3. Health Canada. Notifiable Diseases Annual Summary, 1995. Can Commun Dis Rep 1996;(Supplement 23S9):64-5.