

## **New MenB Vaccine Offers Hope**

by Dr. Ron Gold

The missing vaccine has finally arrived. Up to now, we have had vaccines against most of the major causes of bacterial meningitis: Hib vaccine (given in the combination Diphtheria-Tetanus-acellular Pertussis-inactivated polio vaccine-Hib vaccine for infants), pneumococcal vaccine (Prebar13), and meningococcal C and ACYW vaccines. But there has been no vaccine against serogroup B meningococcus which is now the #1 cause of bacterial meningitis in Canada.

The new vaccine, called 4CMenB (trade name, Bexsero®, manufactured by Novartis Pharmaceuticals Canada Inc.), is now available in Canadian pharmacies. The vaccine is available for purchase with a prescription and will cost approximately \$100 per dose.

4CMenB stands for 4 component meningococcal serogroup B vaccine. Three of the four components of the vaccine are purified proteins derived from the outer cell membrane of the bacteria. The fourth component is the group B vaccine used to control an outbreak of group B meningitis in New Zealand. This fourth component enhances the immune responses to the other 3 proteins.

The vaccine has been found to be safe in infants, toddlers, adolescents, and adults. It can be given at the same time as the routine infant vaccines. The only side effect that is more frequent in infants given 4CMenB compared to routine vaccine alone is fever. The fever associated occurs 6-12 hours after 4CMenB vaccination and may last for 1-2 days. Administration of acetaminophen prevents the fever and has no effect on the immune responses to any of the vaccines.

4CMenB stimulates the immune system to make protective antibodies against most group B strains, antibodies which kill the bacteria. The ability to induce such killing antibodies is the measure used to decide whether or not a vaccine against the meningococcus will be effective in preventing disease.

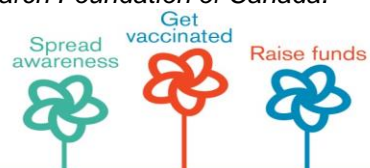
The schedule for infants is 3 doses at 2, 4, 6, months of age followed by a booster dose during the second year of life. Infants between 6-12 months of age will require 2 doses plus a booster. Children and adolescents will need 2 doses of vaccine.

The Meningitis Research Foundation of Canada hopes this vaccine will soon be available for all Canadian children as part of the provincial/territorial immunization programs. The vaccine offers the hope of being able to prevent the #1 cause of bacterial meningitis in Canada.

If you agree that the 4CMenB vaccine should be part of the provincial immunization program in Ontario and the rest of Canada, write or call your MPP and ask him or her to support making 4CMenB available free to all children.

*Dr. Ron Gold is the senior medical advisor for the Meningitis Research Foundation of Canada.*

**WHAT YOU CAN DO.**



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