

The Canadian Immunization Guide, Third Edition (1989) recommends that a baby born to an infected mother should immediately receive an injection of hepatitis B immune globulin, and a course of three infant doses of hepatitis B vaccine, the initial dose being given within seven days of birth, and the other two doses at one month and six months after the first.¹¹

RECOMMENDATION NO. 3

The Sub-Committee recommends that the Federal Government develop a program, in cooperation with the provinces and the territories, to routinely test pregnant women for hepatitis B infection. Where the test is positive, the baby should receive hepatitis B immune globulin and hepatitis B vaccine in accordance with the recommendations of the Canadian Immunization Guide.

COST OF HEPATITIS B VACCINE

The cost of hepatitis B vaccine is an important issue in the consideration of any immunization program that might be adopted in Canada. At present, only certain high-risk groups are targeted for immunization but, even in that relatively restricted use, vaccine cost is an issue and may, indeed, be a deterrent to immunization in some cases. There are a number of aspects to the vaccine-cost issue and these are discussed below.

Mr. Frank Evans, a consultant to several pharmaceutical companies, testified that effective vaccines against HBV first came on the market in 1982.¹² The vaccine originally introduced was derived from human blood plasma containing viral surface antigen (HbsAg) collected from persons who were carriers of the virus. Although those vaccines proved to be entirely safe in practice, when the AIDS virus was identified in 1985 there was some public concern because the same populations with hepatitis B infections, and from whom the plasma was collected, also had a relatively high incidence of infection by human immunodeficiency virus (HIV), the virus believed to cause AIDS.

In 1987, commercial supplies of a new hepatitis B vaccine became available, and these were produced using recombinant DNA technology. Genetically modified strains of yeast were used to produce the HBV surface antigen (HbsAg) which was then highly purified and incorporated into a vaccine. With this methodology, there is no possibility of any viral contamination. These vaccines have proven to be completely safe and highly effective against the hepatitis B virus. The plasma-derived vaccines are no longer available in Canada.

According to the testimony of Mr. Evans, the price of the vaccine was \$155 per dose in 1987 and this dropped to \$90 when the new recombinant vaccine was introduced.¹³ The lowest current price in Canada for the vaccine is about \$23.89 per dose. An immunization course typically consists of three doses of vaccine, given at intervals. Thus, hepatitis B immunization currently costs about \$72, in situations where the vaccine is purchased in bulk and the lowest current price applies.

¹¹ Health and Welfare Canada, *Canadian Immunization Guide*, Third Edition — 1989, Minister of Supply and Services Canada, Cat. No. H49-8/1989E, p. 54.

¹² *Proceedings*, Issue 3, p. 7.

¹³ *Proceedings*, Issue 3, p. 11.