Acellular pertussis vaccine for adolescents



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The most rapid increase in cases of pertussis in Canada, Europe and the United States has been in adolescents. In the decade from 1986 to 1996, the proportion of cases in adolescents in Canada rose from 5.2% to 20% (1,2). In a recent large outbreak in British Columbia, the most affected age groups were preadolescents and adolescents (3). Pertussis in adolescents (and adults) can range from a prolonged cough to a severe illness (4); although complications are less common than in infants, severe disease can occur (5). An acellular pertussis vaccine combined with diphtheria and tetanus toxoids (dTap) formulated for adults and adolescents was shown to be safe and immunogenic (6), and was licensed for use in Canada in 1999. Presently, only Newfoundland, Alberta, Nunavut, and the Northwest Territories routinely administer a booster dose of dTap to all adolescents. In a paediatric infectious disease note in 2001, the Infectious Diseases and Immunization Committee urged the National Advisory Committee on Immunization (NACI) to recommend universal use of dTap in place of Td for all Canadian adolescents (7). In the 2002 Canadian Immunization Guide (8), NACI now recommends that all adolescents receive a dose of acellular pertussis vaccine, saying that "the combined adolescent/adult formulation of dTap should be used to replace the adolescent booster of Td" (1). The recent National Consensus Conference on Pertussis recommended that the pertussis control strategy in Canada be changed from a goal "to reduce the incidence and severe morbidity of pertussis among young children" (8) to a goal "to decrease morbidity and mortality from pertussis across the entire life span" (9). The Canadian Paediatric Society endorses the NACI recommendation and the revised pertussis control

strategy recommended by the National Consensus Conference on Pertussis. The Canadian Paediatric Society recommends that all provinces implement programs to give an adolescent booster dose of acellular pertussis vaccine. The exact timing of this dose may vary depending on the local epidemiology. Until these vaccines are funded under the provincial health plans, physicians should discuss the risks and benefits of acellular pertussis vaccination with adolescents and their parents so that they can make an informed decision about receiving the dTap vaccine at their own expense in place of the provincially funded Td vaccine.

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The recommendations in this statement do not indicate an exclusive course of treatment or procedure to be followed. Variations, taking into account individual circumstances, may be appropriate.

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