A new formulation of pneumococcal vaccine was recently licensed by the Food and Drug Administration and will replace the previous 14-valent formulation. This new pneumococcal vaccine is composed of purified, capsular polysaccharide antigens from 23 types of *Streptococcus pneumoniae*. Antigens from the 14 types of *S. pneumoniae* present in the previous formulation represent 71% of all pneumococcal isolates from sterile clinical specimens submitted to CDC for serotyping. The 23 types in the current vaccine represent an increase from 71% to 87% of the isolates.

Recommendations regarding the usage of the 23-valent pneumococcal vaccine do not differ from the previously published Advisory Committee on Immunization Practices recommendations (MMWR 1981; 30:410-12). These recommendations include that pneumococcal vaccine should be given only once to adults as local and systemic reactions appear to be more frequent and more severe among healthy adults revaccinated with a second dose. Persons who have received the 14-valent pneumococcal vaccine need not be revaccinated with the 23-valent vaccine as the slight increase in coverage does not warrant the possible increase risk of adverse reactions. (Centers For Infectious Diseases, Division of Bacterial Diseases, Centers For Disease Control, Atlanta, GA, October 12, 1983).

**RABIES PRE-EXPOSURE VACCINATION-HUMAN DIPLOID CELL RABIES VACCINE ADMINISTER BY INTRAMUSCULAR INJECTION ONLY**

Human Diploid Cell Rabies Vaccine was approved for administration by intradermal injection because of the cost savings when using small doses (0.1 ml) for rabies pre-exposure prophylaxis. (See Communicable Disease Bulletin Number 11, Week Ending July 2, 1982; and MMWR 1982; 31:279-85). However, the U.S. Food and Drug Administration's (FDA) National Center For Drugs and Biologics has not approved the intradermal use of rabies vaccine; an application for licensure of intradermal rabies vaccine is presently being considered.

Recently, studies conducted by the Centers For Disease Control of 333 Peace Corps volunteers in eight countries have demonstrated a lower-than-expected antibody response at several time periods following primary immunization using the intradermal route. CDC and FDA are investigating factors which could be responsible for the less satisfactory antibody responses seen in the Peace Corp volunteers recently studied.

Because the nature and extent of the problem are not completely delineated, CDC is recommending certain precautions. If intradermal pre-exposure rabies vaccination is given, CDC recommends that routine serological testing be done after immunization to document adequate antibody response. Because of this problem and the great logistic difficulties in obtaining serological tests in Alaska, we can no longer recommend intradermal use of rabies vaccine. No similar problems have been identified among those persons who have received intramuscular rabies pre-exposure vaccination. Serological testing is not necessary for persons who are vaccinated by intramuscular injection of 1.0 ml doses of human diploid cell rabies vaccine (HDCV).

Until additional information becomes available, we recommend intramuscular use of human diploid cell vaccine for rabies pre-exposure vaccination not be used. Instead we recommend continued use of intramuscular injection of 1.0 ml doses of human diploid cell vaccine. There is no change in the number of doses or schedule of administration of the 3 doses required for pre-exposure vaccination. Please refer any questions to Dr. John Middaugh, State Epidemiologist, Epidemiology Office, 561-4406; or Don Ritter, Northern Regional Laboratory, 474-7017. (MMWR 1983; 32:601-03)