

UNITED STATES GOVERNMENT PUBLIC HEALTH SERVICE, BSS(CH), CDC-Atlanta

Memorandum

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DATE: November 7, 1966

FROM : Secretary, Advisory Committee on Immunization Practices

SUBJECT: Minutes of the ACIP Meeting - October 10-11, 1966

Enclosed is a copy of the minutes from the ACIP meeting on October 10-11, 1966. We expect to receive the Surgeon General's approval of both the smallpox and DTP statements in the very near future and will send final copies at that time.

Thank you for your continuing support and cooperation.

H. Bruce Dull, M.D.
Senior Surgeon

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MINUTES, MEETING NO. 7, ADVISORY COMMITTEE ON IMMUNIZATION PRACTICES,
OCTOBER 10-11, 1966

The Advisory Committee on Immunization Practices met at the Communicable Disease Center on October 10-11, 1966. Those in attendance were:

Committee

Dr. David J. Sencer, Chairman	Dr. Theodore A. Montgomery
Dr. H. Bruce Dull, Secretary	Dr. Roderick Murray
Dr. Gordon C. Brown	Dr. Jay P. Sanford
Dr. Alice D. Chenoweth	Dr. Paul F. Wehrle
Dr. Geoffrey Edsall	

Invited Participants

Dr. Harry M. Meyer, Jr., Chief, Laboratory of Viral Immunology, Division of Biologics Standards, National Institutes of Health, Public Health Service, Bethesda, Maryland

Dr. Margaret Pittman, Chief, Laboratory of Bacterial Products, Division of Biologics Standards, National Institutes of Health, Public Health Service, Bethesda, Maryland

Dr. Eugene W. Veverka, Deputy Chief, Division of Foreign Quarantine, Public Health Service, Silver Spring, Maryland

CDC Staff - Participants and Discussants

Epidemiology Branch:	Dr. Alexander D. Langmuir Dr. Jacques Caldwell Dr. Steve Schroeder Dr. Robert J. Warren
Immunization Activities:	Dr. F. R. Freckleton Dr. John J. Witte
Laboratory Branch:	Dr. U. Pentti Kokko
Smallpox Eradication Program:	Dr. D. A. Henderson Dr. John D. Millar

The P.H.S. Advisory Committee on Immunization Practices held its fall meeting at the Communicable Disease Center in Atlanta, Georgia, October 10-11, 1966. Primary business of the one and one-half day meeting was completion of recommendations dealing with diphtheria and tetanus toxoids and pertussis vaccine, tetanus prophylaxis in wound management, and smallpox vaccination in the United States. Considerable work had been done by members of the ACIP in the two months prior to the fall meeting in reviewing and commenting on preliminary drafts of recommendations dealing with these subjects, and the formal meeting itself was concerned with resolution of minor differences in philosophy, emphasis, and wording.

Diphtheria, Tetanus, and Pertussis

With respect to diphtheria and tetanus toxoids and pertussis vaccine, the following points summarize the major conclusions which the ACIP set forth in the specific recommendation (copy attached).

1. Primary immunization of infants and small children employing DTP should include the three initial and one-year reinforcing doses. A booster DTP immunization, preferably at the age of school entry includes the last currently recommended inoculation of pertussis vaccine.

2. Primary immunization of adults, children age seven or more, and all boosters following primary immunization (except for DTP as described in #1) can satisfactorily utilize Td (tetanus and diphtheria toxoids, adult type) which obviates need for Schick or Moloney testing. Booster doses at only 10-year intervals are now considered to be a conservative and reasonable method for achieving adequate continuing protection.
3. Because of the probably lifelong maintenance of ability to respond to tetanus toxoid after even one injection, tetanus prophylaxis in wound management can reasonably employ Td - unless contraindicated by past experience with untoward reactigenicity of the combined form - in all individuals except the completely unimmunized. Tetanus immune globulin (human), preferably, or antitoxin need only be considered in this latter instance.
4. The adsorbed forms of tetanus and diphtheria toxoids and pertussis vaccine are preferred.

Smallpox

With regard to smallpox vaccination (copy attached), the Committee recommended the continued use of widespread smallpox vaccination in childhood - preferably vaccination between the first and second birthdays - as the presently most practicable method for community protection in the United States against spread of introduced smallpox.

The recommendation for delaying primary vaccination until a child has passed its first birthday is an attempt to minimize likelihood of vaccine reactions observed more frequently under age one. Regular childhood immunization can reduce the acknowledged increasing risk of reactions from primary vaccination in adults who will have continuing need for smallpox protection as part of requirements for international travel.

Recommendations for vaccination and interpretation of responses are based on those set forth by the Expert Committee on Smallpox of the World Health Organization.

Measles Vaccines

Dr. Robert Warren and staff from the Childhood Virus Diseases Unit of Epidemiology Branch discussed observations of five cases of vesicular disease occurring as part of a community-wide outbreak of measles in Riverton, Wyoming. Serologically, these five cases were shown to be measles with unusual clinical presentations occurring in individuals previously immunized with inactivated measles virus vaccine.

Dr. Warren Winklestein in Buffalo, New York was reported to have had a somewhat related experience in showing that some children with previous inactivated measles virus vaccine responded unusually to live attenuated measles virus inoculated intradermally as a skin test. Erythema, induration, and in one instance erythema multiforme-like responses were observed. No similar results occurred when previously unimmunized children received the live attenuated virus by the same route.

The ACIP expressed some concern over the variously reported experiences in combinations of live attenuated measles virus vaccines following inactivated material when separated by an interval of several months or more. When additional data are accumulated, the Committee plans to comment more fully on the relationships.

In line with presentation of C.D.C.'s proposal of feasibility in eradicating measles during 1967 with concerted effort toward immunization of one-year old infants and those susceptibles in kindergarten, first, and second grades, the ACIP reaffirmed its position on measles eradication by subscribing to the supplementary statement attached to the minutes of the meeting (Appendix A).

Other Business

Winter meeting of the ACIP was scheduled for February 16-17, 1967, at which time it was recommended that rabies prophylaxis be considered and that the previous ACIP statement with regard to polio vaccine be reviewed and updated. Discussion of some of the newer and proposed vaccines was also suggested.

Appendix A

In its recommendations on Measles Vaccines (February 17-18, 1966), the Advisory Committee on Immunization Practices advocated immunization of all susceptible children in the United States against measles:

"Universal immunization as part of good health care should be accomplished through routine and intensive programs conducted in physicians' offices and public health clinics. Programs aimed at immunizing children at about one year of age should be established by all communities. In addition, susceptible children entering nursery school, kindergarten, and elementary school should receive vaccine because of their particular role in community spread of measles." The Committee also recommended intensive surveillance of measles in order to appraise the effectiveness of immunization programs and to quickly identify groups in which epidemic control programs should be instituted.

There is already dramatic evidence of a marked decline in the incidence of measles resulting from widespread immunization. At its meeting on October 11, 1966, the Committee strongly urged all health authorities to take further effective action toward the goal of measles eradication from the United States during 1967. To be successful, four conditions which were cited in the previous statement are essential: (1) routine immunization of infants at one year of age; (2) immunization of susceptible children on entry into elementary schools, kindergartens, and nurseries; (3) complete and prompt reporting of measles by physicians, schools, and other sources; and (4) prompt immunization of appropriate susceptible children whenever the occurrence of measles indicates that an epidemic is imminent. As soon as measles is recognized in a community, an efficient epidemic control program can prevent epidemic spread of the disease.

MINUTES, MEETING NO. 6, ADVISORY COMMITTEE ON IMMUNIZATION PRACTICES,
MAY 16-17, 1966

I. The Advisory Committee on Immunization Practices met at the Communicable Disease Center on May 16-17, 1966. Those in attendance were:

a. Committee

Dr. David J. Sencer, Chairman	Dr. Geoffrey Edsall
Dr. H. Bruce Dull, Acting Secretary	Dr. David T. Karzon
Dr. Ernest A. Ager	Dr. Roderick Murray
Dr. Gordon C. Brown	Dr. Paul F. Wehrle

b. Invited Participants

Miss Regina A. Burns, Assistant Chief, Epidemiology & Immunization,
Division of Foreign Quarantine, Public Health Service, Silver
Spring, Maryland (for Dr. Louis Jacobs)

Dr. Earl C. Chamberlayne, Special Assistant to the Director,
National Institute of Allergy & Infectious Diseases, Public
Health Service, Bethesda, Maryland

Dr. James E. Maynard, Chief, Epidemiology Section, Arctic Health
Research Center, Anchorage, Alaska

Dr. Harry M. Meyer, Jr., Chief, Laboratory of Viral Immunology,
Division of Biologics Standards, National Institutes of Health,
Public Health Service, Bethesda, Maryland

Dr. James G. Telfer, Secretary, Council on Environmental and
Public Health, American Medical Assn., Chicago, Illinois

c. CDC Staff - Participants and Discussants

Epidemiology Branch:	Dr. Alexander D. Langmuir Dr. William H. Stuart Dr. Kenneth H. Williams, Jr. Dr. Albert R. Martin Dr. Robert J. Warren
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Immunization Activities:	Dr. F. R. Freckleton
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Laboratory Branch:	Dr. U. Pentti Kokko Dr. Roslyn Q. Robinson Dr. M. Patricia Magovern
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Smallpox Eradication Program:	Dr. D. A. Henderson Dr. Henry Gelfand Dr. Ronald R. Roberto
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II. Influenza Surveillance and Vaccine Discussion

As part of the ACIP annual review of influenza, prospectus for the 1966-67 season, and recommendations for vaccine usage, discussion surrounded the following major areas:

- A. Surveillance of influenza indicated that the U.S. in 1965-66 experienced both types A2 and B illnesses: type A2 showing substantial excess mortality and recognized in the far west, particularly in the southwest; type B with little or no associated excess mortality and having eastern and northwestern U.S. foci. The midwest and mountain states experience with variable amounts of both A and B illness reflected the mixing of the two virus types as spread occurred from their eastern and western concentrations.

The Committee felt generally that with the population "saturation" from both virus strains resulting from the 1965-66 season and that of the previous year, expectations for significant influenza activity in the 1966-67 season were minimal. However, areas that had minimal involvement with type A2 in particular, or with type B influenza could expect limited but recognizable amounts of those specific types in the coming year.

B. Influenza Vaccine Studies and Recommendations

Preliminary reports from field trials employing high potency monovalent influenza vaccines among retired individuals residing

in a southern California community and among high school students in Anchorage, Alaska were presented. Data showed the protective capacity of these specific antigens in both areas with levels of protection falling well within the expected range. In the retirement community, effectiveness as judged by protection against influenza A2 illnesses with fever of 100°F. or more was greater than 90% in individuals receiving type A monovalent vaccines in two successive years. Lower levels of effectiveness were observed from only a one year's dose of type A vaccine. In the Anchorage high school outbreak, although perhaps less accurate case counts were possible, there was likewise protection at approximately the 60% level for both A and B vaccines during a unique experience in which subsequent outbreaks of both virus types appeared in the same population. Commercial polyvalent vaccine compared to the monovalent forms in the high school was less effective than the latter vaccines.

Large scale evaluation of the potency of single doses of commercially available polyvalent vaccines in industrial, educational and hospitalized individuals was discussed. Potency judged on the basis of fourfold or greater hemagglutination inhibiting titer responses was shown to be variable and often of a low order of magnitude (generally, only 20-50% of individuals developing antibodies to the specific antigenic components of the vaccine felt to represent

contemporary strains). Of importance was the as yet unexplained observation that an even less adequate response occurred among individuals receiving their annual booster dose than among those given a single primary immunization.

- C. There was lengthy discussion of presently available commercial polyvalent influenza vaccine with its variations in potency and the expectation of only minimal influenza in the 1966-67 season. The Committee chose to recommend no more than the immunization of previously defined "high risk" groups. Routine influenza vaccination for pregnancy was not recommended unless the individual also was "high risk" for other reasons (See Influenza Recommendations).

The Committee's concern over the vaccine as it presently exists was of sufficient magnitude to prompt adoption of a recommendation to the Surgeon General for vaccine review and consideration of adjustment in its formulation (See Appendix I).

III. Smallpox Immunization

Background data on smallpox immunization in the current era of international travel and the documented importations from endemic areas were discussed as part of the first stage in development of recommendations for the vaccine's domestic use. It is planned that prior to the October meeting of the ACIP, a staff report will be developed by the Smallpox Eradication Program of C.D.C. and circulated among ACIP members. This report will form the basis for the Committee's review at its next meeting and a formal recommendation on policy.

IV. Typhoid-Paratyphoid A and B Vaccines

Detailed review of the current status of typhoid fever in the U.S. formed the basis for discussion of the traditional and variable use of typhoid vaccine. The present epidemiological pattern of typhoid with characteristically sporadic, scattered cases related to carriers and not to common source infection led the Committee to urge that typhoid vaccine not be recommended for general use, except under specified circumstances. The Committee reviewed evidence dealing with dosage schedules and booster immunizations and accordingly altered somewhat the current routine, thereby also bringing it into more alignment with military and other contemporary patterns (See Typhoid Vaccine Recommendations). Paratyphoid A and B vaccines were felt not to have a place in current immunization programs because of the ineffectiveness of antigens. Their deletion from the combined typhoid-paratyphoid A and B vaccines was also urged in view of the likely contribution to vaccine reactions (See Paratyphoid A and B Vaccines Recommendations).

V. Dr. Harry M. Meyer, Jr., Chief, Laboratory of Viral Immunology, NIH, presented a report of the recent development of a live attenuated rubella virus antigen and its limited trial in susceptible children. The ACIP was most interested in the demonstration of attenuation as evidenced by factors of tissue culture growth, infectivity, and relative non-communicability.

VI. Brief review of available data on live attenuated measles virus vaccine prepared in canine kidney cell culture had been requested in order that the ACIP could be cognizant of its similarity to other Edmonston strain vaccines. Available data were generally

felt not to permit interpretation as showing significant differences from these other vaccines.

VII. Agenda items to be considered at the fall meeting will include:

- 1) Smallpox immunization in the U.S. (continued)
- 2) Diphtheria-tetanus immunization, particularly in adults.
- 3) Plague vaccine, booster doses.

The regular fall meeting of the ACIP was scheduled for Monday and Tuesday, October 10 and 11 in Atlanta. Pertinent materials for discussion and review will be distributed by the Secretary prior to the meeting. With the thanks of the Chairman, the meeting was adjourned at 1:15 P.M., May 17, 1966.

H. Bruce Dull, M.D.

APPENDIX I

Review of accumulated influenza vaccine studies indicates that vaccine potency and effectiveness may vary considerably. Acceptable antibody responses to specific vaccine antigens occur only when adequate quantities of these antigens are administered. Furthermore, vaccines are most clearly protective when component antigens closely resemble currently infecting strains.

Because at the present time untoward side reactions place limits on the vaccine's total antigenic mass, consideration should be given to the production of a bivalent vaccine in which an optimal quantity of antigen is distributed only between contemporary examples of types A and B virus.

When a vaccine with improved potency and predictable effectiveness can be obtained, a more fully useful program for the employment of influenza vaccine can be developed. Therefore, the ACIP wishes to go on record in support of the complete reevaluation of influenza vaccine proposed by the Division of Biologic Standards.