10/9

DEPARTMENT OF HEALTH AND HUMAN SERV CES

PUBLIC HEALTH SERVICE

CENTERS FOR DISEASE CONTROL AND PREVE TION

Minutes of Meeting

ADVISORY COMMITTEE ON IMMUNIZATION PR/ CTICES

October 6-7, 1993

Atlanta, Georgia

ADVISORY COMMITTEE ON IMMUNIZATION PR CTICES
Centers for Disease Control and Preventio
Auditorium A
October 6-7, 1993

OCTOBER 6

8:00 AM	Introduction Additional Charge to ACIP	Dr. S. K Dr. W. O nstein
8:30 AM	Varicella Statement	Dr. S. H nes
10:15 AM	BREAK	
10:30 AM	Review of Antiviral Recommendations for Influenza Update on Status of Licensure of Rimantadine Review of Antiviral Resistance to Amantadine and Rimantadine	Dr. N. A en Dr. N. C
11:30 AM	Update on the ACIP Recommendation for Meningococcal Vaccines	Dr. J. W ger
12:00 AM	LUNCH	
1:00 PM	Emergence of Drug Resistance Pneumococcal Infections in the United States: Need for Aggresive Vaccination Promotion	Dr. R. B man
1:30 PM	Adverse Consequences of Vaccines Other than Pertussis and Rubella	Dr. K. S tton Institut of Medicine
2:45 PM	Injury Compensation Update	Mr. T. B ier NVICP
3:00 PM	BREAK	
3:15 PM	Vaccine Liberalization of Measles Timing of First Dose from 12-15 Months	Dr. L. M kowitz
4:00 PM	Recommendation for Use of BCG Vaccine	Dr. R. H bner
5:00 PM	Cost Benefit of Childhood Vaccinations	Dr. S. H ler

ADVISORY COMMITTEE ON IMMUNIZATION PRACT ES
Centers for Disease Control and Prevention
Auditorium A
October 6-7, 1993

OCTOBER 7

8:15 AM	The President's New Immunization Initiative	Dr. D.A.] nderson HHS
8:45 AM	Update on the National Vaccine Program	Dr. A. Ro ıins NVP
9:15 AM	Simplifying the Schedule Regarding the Third Dose of OPV	Dr. R. Su ɛr Dr. P. Wı ht Vanderb Univ.
10:00 AM	**BREAK**	
10:20 AM	Need for 4th Dose DTP Vaccine at 15-18 months	Dr. N. Be PHLS, L don Dr. J. Ch ry UCLA Dr. S. Lo St. Chris pher's Hosp. Dr. P. Stı ɔel Dr. R. Su ɛr
12:00 PM	Summary of FDA Workshops on "Combined Vaccines...." and "Harmonization of Reporting of Adverse Events Following Vaccination"	Dr. C. Ha legree FDA
12:30 PM	**Public Comment**	
12:45 PM	**ADJOURN**	

ATTENDEES:

COMMITTEE MEMBERS PRESENT
Dr. Samuel L. Katz, Chairman
Dr. Mary Lou Clements
Dr. Kathryn Edwards
Dr. Neal Halsey
Dr. Rudolph Jackson
Dr. Carlos Ramirez-Ronda
Dr. Fred Thompson
Dr. Joel Ward

Ex Officio Members
Dr. Carolyn Hardegree (FDA)

Liaison Representatives
Dr. Marvin Amstey (ACOG)
Dr. Pierce Gardner (ACP)
Dr. Caroline B. Hall (AAP)
Dr. Walter Hierholzer (HICPAC)
Dr. Edward Mortimer, Jr. (AMA)
Dr. Georges Peter (AAP)
Dr. Gregory Poland, (AHA)
Dr. David Scheiffle (NACI)
Dr. Richard Zimmerman (AAFP)

Acting Executive Secretary
Dr. Walter Orenstein

Centers for Disease Control and Prevention

Office of the Director
Dr. Dixie Snider

Office of the General Counsel
Mr. Kevin Malone

Epidemiology Program Office
Dr. Han Choi
Dr. Laura Fehrs

International Health Program Office
Dr. Joe H. Davis

National Center for Infectious Diseases
Dr. Nancy Arden
Dr. Joseph Bresee
Dr. George Carlone
Dr. Nancy Cox
Dr. Carmen Deseda
Dr. Scott Dowell
Penina Haber
Dr. Jim Hughes
Dr. Eric Mast
Helen Regenery
Dr. Steven Rosenthal
David Shay

National Center for Prevention Services
Rosamond Dewart
Dr. Alan Hinman

National Immunization Program
Dr. William Atkinson
Dr. Bob Chen
Dr. Steve Cochi
Dr. Vance Dietz
Judy Gantt
Dr. Jacqueline Gindle
Dr. Dayla Guris
Dr. Steve Hadler
Dr. Kimberly Heath
Dr. Sandra Holmes
Dr. Sonja Hutchins
Dr. Charles LeBaron
Dr. Arthur Manoharan
Dr. Lauri Markowitz
Dr. Mark Papania
Dr. Mary Reichler
Dr. Peter Strebel
Dr. Ray Strikas
Dr. F. VanLoon
Dr. Walter Williams

Office of Public Affairs
Anne Sims

ATTENDEES CONTINUED:

Department of Health and Human Services
Dr. D.A. Henderson

U.S. Public Health Service
Mr. Thomas E. Balbier, Jr.

Food and Drug Administration
Julia Barrett
Drusilla Burns
Carl Frasch
Dr. Donna Freeman
Karen Goldenthal
Dr. Philip Krause
Dr. Margaret Mitrane
Dr. Linda Teague

National Institutes [illegible] Health
Dr. R. Rabinovich

National Vaccine Pro[illegible]am
Dr. Joel Breman

Navy Environmental H[illegible]lth Center
Dr. Robert Brawley

Army Surgeon General Office
Vincent P. Fonseca

Others Present
Pamela Adkins, Merck Vaccine Division
Stephan Antonsson, Forest Labs
Dr. Norman Begg, London
Jill Chamberlin, Vaccine Bulletin
Dr. James D. Cherry, UCLA
Dr. Jeff Davis, Wisconsin Department of Health
Dr. Ruth Ann Dunn, Michigan Department of Public Health
Craig Engessen, Lederle-Praxis
Carol Esch, Merck Vaccine Division
John Forro, Wyeth-Ayerst
Steve Frandzel, Medical World News
Carol Frankel, Evans/Medeva
Dr. Anne Gershon, Columbia University
Elizabeth Gorr, Fox, Bennett and Turner
Dan Granoff, Chiron Corp.
Valerie H. Greenwood, Merck & Co., Inc.
M. Elizabeth Halloran, Emory University
Barbara Howe, SmithKline Beecham
Clifton Neil Irby, Christian Science Church
Kenneth Keen, Merck Vaccine Division
Robert Kohberger, Lederle Praxis
Dr. Saul Krugman, NYU Medical Center
Sally Kubertin, Pediatric News
Dr. Diana Lennon, New Zealand Public Health
Dr. Sarah Long, St. Christopher's Children's Hosp., Phila[illegible]lphia
Lucinda Long, Lederle Praxis
Dan Mahore, Lederle Praxis Biologicals
Wayne Morges, Merck & Co., Inc.
Dr. David Nalin, MRL
Marjorie Nicholls, Forest Labs

Others Present continued

Lorraine Radick, Lederle-Praxis Biologicals
Anne Rochel, Atlanta Journal and Constitution
Marie Rosenthal, Infectious Diseases in Children
Benjamin A. Rubin, Wyeth
Dr. Stuart L. Scheiner, Forest Labs
Dan Soland, SmithKline Beecham
Dale R. Spriggs, VRI, Inc.
Kathleen Stratton, Institute of Medicine
Barbara Sweeney, NAPNAP
Dr. T. R. Ubertini, North American Vaccine
Jose Viarengo, Argentina Public Health Ministry
Thomas Vernon, Merck Vaccine Division
Ralph Vosdingh, Connaught Laboratories
Diana Wance, Merck
Dr. Jo White, Merck Research Laboratories

Abstract

At the ACIP meeting convened at CDC on October 6-7, 1993, embers critiqued ACIP draft statements on varicella, antiviral ag its for influenza, and outbreak control for meningococcal vaccines They voted on a proposed statement of recommended vaccines and schedu es--a new requirement for the ACIP under the Omnibus Budget Reconci ition Act of 1993. The group voted to alter the measles recommendatior to allow a more permissive 12-15 month MMR vaccination nationwide; nc to change the current DTP recommendations regarding the fourth dose; nd to recommend giving the third dose of OPV on the same schedu as DTP, namely, at 6 months of age. A working group was created t evaluate and respond to a congressionally requested IOM report on adver events associated with childhood vaccines. Other discussions and presentations are outlined in the Executive Summary and minutes, below.

Executive Summary

On October 6-7, 1993, the Advisory Committee on Immunizati ı Practices (ACIP) convened at the Centers for Disease Control and Pre ıntion (CDC). Dr. Samuel Katz, Chairperson, opened the meeting at 8:00 a ı. on October 6. Dr. Walter Orenstein was Acting Executive Secretary.

Dr. Katz introduced Dr. David Scheifele, the new liaison r ıresentative for the Canadian National Advisory Committee on Immunizati ı; Dr. Walter Hierholzer, standing in for Dr. David Fleming for the Hosp ıal Infection Control Practices Advisory Committee (HICPAC); Dr. Rick Zi ıerman, from the University of Pittsburgh, representing Dr. Ron VanBure for the American Academy of Family Physicians; Dr. Anthony Robbins from the National Vaccine Program; and Dr. Gregory Poland, from the layo Clinic, filling in for American Hospital Association liaison membe Dr. William Schaffner.

ACIP members and liaison representatives introduced themse es. Following this, the 45-plus members of the audience introd ed themselves. All members and liaison representatives annou ed their conflicts of interest.

Dr. Orenstein then explained the new Vaccines for Children rogram. Under the Omnibus Budget Reconciliation Act of 1993, the A P has the charge to determine the list of vaccines for routine admin tration to children under age 18 who receive vaccine through the Vacc ıes for Children Program, along with schedules regarding the appro iate periodicity, dosage, and contraindications applicable to t pediatric vaccines for this program. Dr. Orenstein said the ACIP ne led to vote on a proposed list and schedule for pediatric vaccines tha ACIP recommends. Mr. Kevin Malone, from CDC's General Counsel fice, said he would prepare the draft of a motion on such a proposed st on which members could vote.

Varicella Statement

Dr. Sandra Holmes, NIP, summarized responses to the revise comprehensive draft on varicella that had been circulated ACIP members. Dr. Hardegree announced that the license applica on for varicella vaccine has been submitted to the FDA and that a ive review is under way.

Then Dr. Holmes led the ACIP through specific wording abou key issues that were still undecided in the ACIP statement. Dr. Katz sked if committee members agreed that the general experience with ving live and inactivated antigens together is that there has not be interference and that none is anticipated with the varicel vaccine, though more data and studies are needed. Members agreed w h this wording. Dr. Holmes asked that any comments about the sug sted tables or other matters be sent to her or Ms. Gloria Kovach in wr ing by October 27.

Dr. Katz presented the ACIP with a farewell gift, an antiq engraved bell.

Reye Syndrome Update

Drs. Joseph Bresee and Larry Schonberger, DVRD, NCID, upda d the Committee on surveillance for Reye syndrome.

Review of Antiviral Recommendations for Influenza

Dr. Nancy Arden, VR, NCID, said that influenza activity ha started early this season and that CDC has recommended that vaccin ion programs be completed by the end of October.

Rimantadine was approved for marketing on September 17. T new draft of "ACIP Recommendations for the Prevention and Control of nfluenza, Part II. Antiviral Agents" contains more information on re stance, more specific and realistic information on prophylaxis, and mor specific information on dosage and potential adverse reactions.

Dr. Nancy Cox, VR, NCID, reviewed international surveillan for prevalence of amantadine- and rimantadine-resistant viruse and reviewed the mechanisms of antiviral activity of the two drugs. A rking group was created to handle the wording about the use of rimanta ne with children. Its members are Dr. Clements and Dr. Hall and Dr Donna Freeman from FDA.

Update on the ACIP Recommendation for Meningococcal Vaccin

Dr. Jay Wenger, DBMD, NCID, briefly reviewed changes in th final draft in Part I of the two-part meningococcal ACIP recommendatio He asked if the committee was sure it wanted to retain Part II, whi is new and devoted to outbreak control. The Committee indicated its verwhelming support" for this section. Dr. Katz urged that all commen on the draft be returned to Dr. Wenger or Ms. Kovach by October 2

Emergence of Drug-Resistant Pneumococcal Infections in the nited States: Need for Aggressive Vaccination Promotion

Next, Dr. Robert Breiman, BMD, NCID, discussed drug-resist t pneumococci. Many feel that once the proportion of resist t isolates in a community is higher than 5% for a serious infection, e runs risks using that drug. If this is true, use of penicillin as a imary drug for empiric therapy of pneumococcal infection will soon pa . The same is probably true for trimethoprim-sulfamethoxazole and ery romycin. There was discussion about the ACIP's publishing an articl in the *MMWR* on this subject.

Adverse Consequences of Vaccines Other than Pertussis and ıbella

Dr. Kay Stratton from the Institute of Medicine of the Nat ınal Academy of Sciences updated the committee on a congressionally req ısted report on the adverse events associated with childhood vaccines. 'he draft report and an executive summary of it were released on Sep ımber 14 and are now available through the National Academic Press.

Subsequent discussion showed that members were concerned a ıut the lack of attributable risk of the adverse consequences, that is ı say, the fact that denominators were not given and that the frequen ' of such occurrences was not stated. A working group was created t evaluate the report, provide perspective and suggestions for further re ıarch, and advise about what information from the report should be in ırporated into warnings and contraindications for vaccines. The grc ı's members are Mr. Malone and Dr. Orenstein from CDC and Dr. Ward, Dr Halsey, Dr. Clements, and Dr. Jackson from the ACIP.

Injury Compensation Update

Mr. Tom Balbier of the National Vaccine Injury Compensatic Program updated the committee on this program to resolve claims re ılting from adverse reactions to covered vaccines. The spending authc .ty for post-1988 award payments from the vaccine compensation trust fu l was permanently extended; there is no chance that the excise t : will end. The spending authority for the pre-1988 program has increa ıd from $80 million to $110 million annually.

Vaccines For Children Program--Continued

Mr. Malone rejoined the group and distributed a proposed s ıtement that the ACIP could send forward to the Secretary of HHS regarc ıg current vaccines (see Handout #1). It was suggested that the foll ying preparations be added to the list: Td, DT, monovalent mea .es, OPV and IPV, combination products (DTP/haemophilus conjugate). Dr Katz asked for a vote that the provision, as written by Mr. Malone, v :h the caveat that the ACIP will go through the list of currently recomn ıded vaccines very carefully, be considered acceptable to the Committee. The vote was unanimous.

Vaccine Liberalization of Measles Timing of First Dose fr 12-15 Months

Dr. Lauri Markowitz, NIP, discussed the liberalization of ıe measles schedule to increase vaccine coverage in young children. ıe reviewed the reasons for reconsidering the recommended age of vacc ıtion to include children down to 12 months, and detailed five sou ıs of data supporting the early susceptibility to measles of U.S. chi ıren.

She said that the ACIP had three possible actions to consi ır: 1) leave the recommendations as they are now, pending further data ı response to MMR vaccine at 12 and 15 months of age; 2) change the rec ıended age

for MMR nationwide to 12 months; and 3) or alter recommend ions to allow a more permissive 12-month MMR vaccination nationwid The vote was unanimous for the third recommendation. Dr. Markowitz ill prepare a succinct summary of her presentation for the *MMWR*. A pa graph would be added that articulates the ACIP recommendation.

Cost Benefit of Childhood Vaccinations

Dr. Steve Hadler, NIP, gave Dr. E. Hatziandreau's summary CDC/Batelle collaborative work to reexamine the benefits and costs of ildhood immunizations. For DTP analyses, $7 is saved in direct co s for every $1 spent. For MMR, the direct costs are $15-$20 saved for very dollar spent. For polio, almost $4 is saved for every dollar spe .

Dr. Katz adjourned the meeting for the day at 5:30 p.m. He opened the meeting again on October 7 at 8:15.

The President's New Immunization Initiative

Dr. D.A. Henderson, Deputy Assistant Secretary for Health- ience, discussed the President's new immunization initiative, for hich Dr. Henderson has responsibility.

Update on the National Vaccine Program

Dr. Anthony Robbins discussed personnel changes in the Nat nal Vaccine Program. He announced a new subcommittee, led by Dr. Barr Bloom, to determine future vaccine needs of the country and to enter nto open dialogue with manufacturers. He then briefly discussed hi program's work with CDC, HCFA, and the National Governors Associatic in getting the Vaccines for Children program off the ground.

Simplifying the Schedule on Third Dose of OPV

Next, Dr. Peter Wright of Vanderbilt University reviewed e .demiology, immunogenicity and long-term antibody persistence data tha suggest that OPV3 can be given safely and effectively at 6 months of ag Following a brief discussion, Dr. Katz asked for a vote of ACIP memb :s about whether they endorsed publishing a recommendation that mak ; it the custom to give OPV on the same schedule as DTP, namely, at 2, 4, and 6 months. The motion passed.

Dates for 1994 ACIP Meetings

Dr. Katz announced the following dates for 1994: February 3-24 and October 19-20. June was still undecided. [Note: June 2! 30 has now been agreed upon.] Ms. Kovach will resolve the June dates ad inform members.

Need for a Fourth Dose of DTP Vaccine at 15-18 Months

Dr. Hadler asked the ACIP to consider the need for a fourt dose of DTP at 15 to 18 months of age. Dr. Sarah Long from St. Christ her's Hospital in Philadelphia discussed DTP immunogenicity; Dr. eter Strebel, NIP, presented data on effectiveness; Dr. Steve R enthal, NIP, gave perspectives on the safety of the fourth dose; Dr. N man Begg, a consultant epidemiologist with the Public Health Laborator Service in London, shared the U.K. pertussis experience with a 2-, 3- 4-month DTP schedule; and Dr. James Cherry from UCLA gave perspectives n the immunogenicity of pertussis vaccines and perspectives on t U.K. and U.S. experiences with them.

Dr. Roland Sutter, NIP, then presented three options for t ACIP to decide on regarding DTP: 1) make no change in current DTP recommendations; 2) discard the recommendation for a fourt dose of DTP; and 3) de-emphasize the fourth dose, but continue with dos 4 and 5 as boosters. The ACIP members voted unanimously for no chang

Summary of Two FDA Workshops

Dr. Hardegree read a summary on the International Workshop n Combined Vaccines and Simultaneous Administration, prepared by FDA' Dr. Drusilla Burns (Handout #2).

Dr. Hardegree also summarized CEBR's "Harmonization of Rep ting of Adverse Events Following Vaccination," held the week befor in Bethesda and sponsored by NIH, NVPO, WHO and others. Some national onitoring and surveillance programs have been started or are being s up.

Dr. Katz invited public comments; there were none. He the thanked everyone and adjourned the meeting at 12:25 p.m.

A summary of agreed-upon actions follows the full minutes. On October 6-7, 1993, the Advisory Committee on Immunization Practice (ACIP) convened at the Centers for Disease Control and Prevention CDC) to discuss the status of numerous vaccine-preventable disease and vaccine-related issues. Dr. Samuel Katz, Chairperson, opened the eting at 8:00 a.m. on October 6. Dr. Walter Orenstein was Acting E cutive Secretary.

Dr. Katz introduced Dr. David Scheifele, the new liaison r resentative for the Canadian National Advisory Committee on Immunizati ; Dr. Walter Hierholzer, standing in for Dr. David Fleming for the Hosp al Infection Control Practices Advisory Committee (HICPAC); Dr. Rick Zi erman, from the University of Pittsburgh, representing Dr. Ron VanBure for the American Academy of Family Physicians; Dr. Anthony Robbins from the National Vaccine Program; and Dr. Gregory Poland, from the layo Clinic, filling in for American Hospital Association liaison membe Dr. William Schaffner.

ACIP members and liaison representatives introduced themse es.
Following this, the 45-plus members of the audience introdu ed
themselves. It was an extensive group, including represent tives of
vaccine manufacturers, academia, state and federal governm t agencies,
and churches.

Dr. Orenstein, head of the National Immunization Program, nounced that
Executive Secretary Dr. Claire Broome had had a baby boy. e also said
there would be new seating arrangements at the next meetin Finally,
he asked for members and liaison representatives to announ any
conflicts of interest. Regardless of conflicts, all membe may
participate in discussions; however, a person with a confl t cannot
participate in a vote.

Dr. Katz reported his group is doing work with Lederle-Pra s with HIV
recombinant vaccine; hepatitis A vaccines from Merck; and th HIV
vaccines from Genentech, Microgenesys, and Biocine. Dr. M y Lou
Clements is also involved in HIV vaccine trials, involving accines
produced by Chiron, Genentech, Virogenetics, Pasteur-Merie , and the
United Biomedical Incorporation. She also serves as a con ltant for
Microgenesys and Virus Research Institute. Dr. Neal Halse is
conducting vaccine studies involving vaccines from Connaug , SmithKline
Beecham, Merck, and Lederle-Praxis, and has received suppo to attend
conferences from SmithKline Beecham. Dr. Ted Mortimer is consultant
to Lederle-Praxis on acellular pertussis vaccine. Dr. Pol d's vaccine
research group receives some research support money from C naught,
Merck, and Johnson & Johnson Pharmaceuticals. Dr. Scheife directs a
vaccine evaluation center that has projects funded by Conn ght, Lederle
and SmithKline. Dr. Joel Ward currently has research supp t from
Connaught, Merck Sharp & Dohme, and SmithKline Beecham.
Dr. Kathy Edwards has received funding from vaccine studie from
Connaught, Merieux, Lederle-Praxis, SmithKline Beecham, an Evans, and
is a consultant for Institute Merieux and for SmithKline B cham.

Dr. Orenstein then explained the new Vaccines for Childrer rogram.
Under this program, the federal government will purchase a . vaccines
for children who are on Medicaid or are Medicaid-eligible, hose who
have no insurance, and Native Americans. In addition, chi lren who are
served by federally qualified health centers can receive f e vaccines
if their private insurance does not cover immunizations. ne importance
of this program to the ACIP is that, under the Omnibus Buc t
Reconciliation Act of 1993, the ACIP has the charge to det mine the
list of vaccines for routine administration to children ur r age 18 who
receive vaccine through the Vaccines for Children Program, along with
schedules regarding the appropriate periodicity, dosage, a i
contraindications applicable to the pediatric vaccines fo his program.
This program is to begin October 1, 1994.

Dr. Orenstein said the ACIP needed to vote on a proposed st and
schedule for pediatric vaccines that the ACIP recommends that the
process of public comment can begin. Final votes would b taken at the

February ACIP meeting. Mr. Kevin Malone, from CDC's Gene l Council, said this is the first time CDC has had to deal with an a isory committee becoming an operational one. He said he would epare the draft of a motion on such a proposed list for members to te on at this meeting.

Varicella Statement

Dr. Sandra Holmes, NIP, then discussed the process by whi the proposed ACIP varicella statement was produced. She then introduc the members of the Varicella Working Group (Drs. Edwards, Peter, Mort er, Van Buren, De Buono, and Hall. Dr. Anne Gershon was consulta to the working group).

Dr. Holmes then summarized the 12 responses to the revise comprehensive draft circulated to the entire ACIP. The key issues were

--routine immunization with catch-up immunization wa favored by 10 of 12 respondents.
--age for routine immunization preferred 12-18 month
--age for catch-up immunization preferred 2-12 years

Nine respondents were also in favor of immunizing health- re workers (HCWs). Six respondents favored immunizing family member of immunocompromised patients. Dr. Hardegree announced that he license application for varicella vaccine has been submitted to t FDA and that active review is under way.

Then Dr. Holmes led the ACIP through specific wording abo these key issues. After discussion of this vaccine's simultaneous ministration with other vaccines (pp. 17-18 of the draft), Dr. Katz as d if committee members agreed that the general experience with iving live and inactivated antigens together is that there has not b n interference and that none is anticipated with the varice a vaccine, though more data and studies are needed. Members agreed th this wording. Other suggestions regarding the draft ACIP stat ent were:

--drop the term "physician-documented" for documenta on of chickenpox, substituting "a clear or reliable histor "
--for recommendations for conditions requiring stero therapy (asthma), reword to avoid negativity and to add a st ement on acyclovir and check the 1-mg/kg dose of prednisone f consistency with other ACIP documents, which use 2 mg/kg/day as dicating immunosuppression.
--for recommendations for children on aspirin for rh matoid arthritis, a small plurality voted to keep in the st ement on p. 29 about adverse experiences but to drop the introdu ory "Although" and to soften the statement about avoidin use of salicylates for "6 weeks" to "4 weeks."

Regarding the adult and adolescent target groups (p. 20), was suggested that:

--a heading for HCWs be created; a table at the end o the document highlight HCWs; breakthrough infections need to be di ussed for vaccinated HCWs who are exposed; varicella immunizati be recommended for HCWs in contact with susceptible preg nt women; and that the latex agglutination test, which is a fas antibody test, be re-mentioned here.
--international travelers be dropped from the list of arget groups.
--add that varicella immunization may be considered f normal adults without a history of chickenpox.
--indicate that nonpregnant women of childbearing age e "asked about their varicella history," not screened, as stat . Also, such women should be advised to avoid pregnancy for " month," not 3 months, as stated.
--correct the typographical error (<1%) about the inc ence of febrile seizures after vaccination on page 23.

Regarding the statement's treatment of VZIG, the following uggested changes were made:

--In the discussion of pregnant women (pp. 34-35), ba nce the statement about risks of serious complications by ind ating that there are data that show none.
--In the discussion of hospital personnel (pp. 35-36) indicate that we don't have the data for varicella but clarify he role and suggested timing of immune globulins.

Finally, Dr. Holmes asked that any further comments about e suggested tables or other matters be sent to her or Gloria Kovach in riting by October 27.

Before a break, Dr. Katz presented the ACIP with a farewel gift: an antique bell from New Hampshire, engraved with "May the AC recommendations always ring clearly." He gave it to Glori to ring at the end of breaks.

Reye Syndrome Update

Dr. Larry Schonberger, DVRD, NCID, asked Dr. Joseph Bresee o update the Committee on surveillance for Reye syndrome. Dr. Bresee s d published surveillance information for 1991 indicated 15 cases natio ide. Dr. Schonberger said that occasional rare cases of the syndrom associated with bismuth subsalicylate or with long-term aspirin thera of rheumatoid arthritis are reported to CDC, but he did not r all that any of the rheumatoid arthritis cases were associated with var ella.

Review of Antiviral Recommendations for Influenza

Dr. Nancy Arden, VR, NCID, said that influenza activity ha started early this season (e.g., three outbreaks since mid-August Louisiana and numerous reports of flu-like illness in Ohio and other states) and that CDC has recommended that vaccination programs be comp ted by the end of October.

Rimantadine was approved for marketing on September 17. T new draft of "ACIP Recommendations for the Prevention and Control of influenza, Part II. Antiviral Agents" contains more information on re stance, more specific and realistic information on prophylaxis, and mor specific information on dosage and potential adverse reactions.

Dr. Nancy Cox, VR, NCID, then reviewed international surve lance for prevalence of amantadine- and rimantadine-resistant viruse and reviewed the mechanisms of antiviral activity of the two drugs. Les than 1% of influenza viruses isolated from individuals with no known posure to amantadine or rimantadine are resistant to these drugs. I g-resistant viruses have been isolated in certain clinical situations ere rimantadine or amantadine have been used for treatment and rophylaxis. The likelihood that a new subtype or new variant of type A influenza virus with resistant M2 protein would emerge is not very g eat. Continued studies are needed to determine if the frequency f antiviral resistance of naturally occurring flu viruses increases wi the increased use of antivirals.

It was suggested that the paragraph on pharmacology on p. of the draft be dropped. In response to questions, Marjorie Nichols fr Forrest Laboratories, the company that has brought rimantadine to e market, said that the cost of rimantadine will be $29, vs. $20 for mantadine. The generic costs are $15 and $10, respectively.

There was then considerable discussion about the negative rding regarding the use of rimantadine for children when it's cl rly safer than amantadine. Donna Freeman from the FDA said that rev ewers at FDA are aware that this is confusing and illogical. The pedia ic indications are under active consideration with the manufa urer, but there are not enough data to support rimantadine for treat nt of children. ACIP members wanted to soften the wording for use in children but were unsure if the ACIP should recommend some ing that the FDA doesn't. Finally, Dr. Arden asked for the appointment f a working group to resolve such issues. Its members are Dr. Clement and Dr. Hall and Dr. Donna Freeman from FDA.

Update on the ACIP Recommendation for Meningococcal Vacci

After noting that the ACIP statement on Hib was now being rinted, Dr. Jay Wenger, DBMD, NCID, briefly reviewed changes in the f al draft in Part I of the two-part meningococcal ACIP recommendation.

Injury Compensation Update

Mr. Tom Balbier of the National Vaccine Injury Compensati ı Program updated the committee on this program to resolve claims ı ;ulting from adverse reactions to covered vaccines. Several recent le .slative amendments favorably affected this program. One result v ; that the spending authority for post-1988 award payments from the ıccine compensation trust fund was permanently extended; there i no chance that the excise tax will terminate again. There has alsc)een an increase in the spending authority for the pre-1988 progı ı, from $80 million to $110 million annually. He said that awards pa l in 1993 totaled $110.4 million. The accumulated, prospective exc ;e tax collections exceed $600 million.

Vaccines For Children Program--Continued

Mr. Malone rejoined the group and distributed a proposed ;atement that the ACIP could send forward to the Secretary of HHS regaı lng current vaccines (see Handout #1). It was suggested that the fol)wing preparations be added to the list: Td, DT, monovalent me ;les, OPV and IPV, and combination products (DTP/hemophilus conjugate). It was asked if combination products needed to be listed separately. :. Malone said that he would think "any combination thereof" could be us l instead, but that he would look into answering this. In discussion, i was decided not to add the varicella vaccine until licensure was appı ved.

Dr. Katz asked for a vote on the proposal, as written by :. Malone, with the caveat that the ACIP will go through the list of currently recommended vaccines very carefully, be considered accept)le to the Committee. The vote was unanimous in favor of the motioı

Vaccine Liberalization of Measles Timing of First Dose t(12-15 Months

Next, Dr. Lauri Markowitz, NIP, discussed the liberaliza( )n of the measles schedule. She named the reasons for reconsideri the recommended age of vaccination to include children down 12 months of age: 1) it would provide a chance to increase coverage ; l to eliminate missed opportunities; 2) there is now a large amount of (ta indicating earlier measles susceptibility of children born to vacci ted women; and 3) the two-dose measles schedule now used in the United ; ates decreases the importance of small differences in response to vacci tion at 12 and 15 months of age. She also reminded the group that vacc ation at 12 months is already recommended in some populations.

She briefly reviewed five sources of data supporting the arlier susceptibility to measles of U.S. children: measles sur illance data; data indicating changing measles antibody titers in U.S.)men; changing measles antibody titers in infants; increased risk of me les disease in infants born to younger women; and data on response to m sles vaccine. Regarding the last point, Dr. Markowitz said that CDC's ; st estimate of

responses to measles vaccination at 12 months is 93%; it i 97%-99% among 15-month-olds. Almost all children who do not respc l to the first dose of measles vaccine will respond to the second c se.

Dr. Markowitz said that the ACIP had three possible actior to consider: 1) leave the recommendations as they are now, pending furt er data on response to MMR vaccine at 12 and 15 months of age; 2) cha ge the recommended age for MMR nationwide to 12 months; and 3) o1 lter recommendations to allow a more permissive 12- to 15-montl MMR vaccination nationwide. When Dr. Katz asked for a vote i was unanimous for the third recommendation. Dr. Katz then asl l Dr. Markowitz to prepare a succinct summary of her presentatic for the *MMWR*. A paragraph would be added that articulates the AC recommendation.

Cost Benefit of Childhood Vaccinations

Dr. Steve Hadler, NIP, gave Dr. E. Hatziandreau's summary : CDC/Batelle collaborative work to reexamine the benefits and costs of ildhood immunizations. That study is updating earlier cost-benefi studies, filling in gaps from new studies, and using similar methoc ogies for all the vaccines. Complete or preliminary data are now a1 lable for DTP, MMR, and OPV. For DTP analyses, the bottom line is t it for every $1 spent, $7 is saved in direct costs for health care. Fc MMR, the direct costs are $15-$20 saved for every dollar spent. Fc polio, almost $4 is saved for every dollar spent. When indirect sts are also considered, cost benefit increases substantially for each ccine.

Dr. Katz adjourned the meeting for the day at 5:30 p.m.

Dr. Katz opened the meeting on October 7 at 8:15.

The President's New Immunization Initiative

Dr. D. A. Henderson, Deputy Assistant Secretary for Healtl cience, discussed the President's new immunization initiative, fo1 hich Dr. Henderson has responsibility. Although the United States is had an immunization program for 30 years, our immunization statu ls second only to Haiti in the Americas as the poorest immunization verage for preschool children. He emphasized that the commitment of ie President, the fact that he has made immunization a presidential init tive, is a huge boost--and probably half the battle, in turning such isatisfactory rates around. He said that the initiative has a provisio1 for developing registries for tracking immunization.

He then outlined the precise goals of the new initiative. The first and major one is to reduce vaccine-preventable disease occurre e. Thus, a major new emphasis will be placed on surveillance with ca1 ful investigation and confirmation of vaccine-preventable dis ses. The target for most diseases is zero indigenous cases, except r pertussis, mumps, and hepatitis B.

The second set of goals relates to coverage. In the Year 00 plans, 90% immunization coverage by age 2 years by the year 2000 s the goal. Dr. Donna Shalala, Secretary of Health and Human Services, as clearly indicated that this goal is unsatisfactory. Ninety percen coverage of 2-year-old children by 1996 would be satisfactory. By 90% overage is meant 90% coverage by each of the individual antigens. Th includes 3 doses each of DTP, OPV, and Hib vaccine and 1 dose of MMR ccine.

Since there were no CDC data surveys of immunization cover e from 1985 to 1991, this will not be easy. In 1991, the National Cen r for Health Statistics undertook a Health Interview Survey, which foun coverage rates of 82% for measles, 69% for DTP3, and 53% for OPV-3. There are not yet any data on Hib or hepatitis B. Nor are the data vided by state. Beginning in January 1994, the survey data will be onfirmed by review of individual records. In addition, contracted ran m-digit-dialing surveys will provide state-by-state data by 1994. inally, a stratified system for sampling in cities--using census and ocioeconomic tract data and developed in the 1960s--will be rejuvenated o help metropolitan areas undertake their own immunization covera surveys.

A third set of goals has to do with publicity and consciou ness raising. In terms of specific activities, HHS plans to undertake an extensive publicity and consciousness-raising campaign. The Initiat e has been inundated by various private sector and volunteer groups w are anxious to participate (e.g., McDonald's, Kiwanis, Rotary, Junior eague, Walt Disney). He is working to present a comprehensive package f simple messages to raise the consciousness of parents about the i portance of immunization.

Fourth, health-care providers, who tend to be complacent a out immunization, also need to be involved. Right now, surve show that only 70% of young children who go to HMOs--where immunizat ns are fully paid for--are fully immunized. Many physicians put it of feeling the children will be immunized at school entry anyway.

Dr. Henderson cited the innovative methods to boost immun ation employed by the United Kingdom, where immunization has ne r been mandatory. Immunization levels had hovered around 60%. en $1000 bonuses were awarded to any physician who achieved a cove ge rate of 70% for the children on his panel--and $3000 if the rates se to 90%--coverage rates rose within several years to 92%-96% rates or the different antigens. He said he was sure the United State could accomplish this high level of coverage.

NVP is also considering audits of HMOs, contacting insura e companies to get them to cover immunizations (for example, the insu nce provider to Merck wasn't covering immunization until recently). A a result, all insurance programs under the federal employee health bene t now offer immunization insurance; a year from now, it will be first ollar coverage.

Finally, Dr. Henderson pointed out that CDC's Division of mmunization is now the National Immunization Program, reporting direct to the CDC Director. He added that Dr. Kenneth Bart, who has been he ling up the National Vaccine Program, is shifting to the Office of Int national Health in Washington, D.C., where his prime interests lie. Dr. Anthony Robbins is now head of the National Vaccine Program Office Dr. Gina Rabinovich, Dr. Joel Breman, and Mr. Rick Leach (head of p olic relations for the Children's Immunization Initiative) are lso joining the staff, now located at Room 730E, 20201 Hubert Humphrey Building.

Dr. Henderson summarized by saying he thought the country ad an excellent chance of reaching 90% immunization coverage by 996, establishing thereby a system to introduce other antigens a an appropriate manner. If we cannot reach that goal--provid the simplest, most cost-preventive measure in the health-care ystem to 90% of children--it raises the question of whether we could d any other preventive health care satisfactorily. In this sense, it a litmus test of every health system.

Update on the National Vaccine Program

Dr. Anthony Robbins then discussed personnel changes in t National Vaccine Program. He announced a new subcommittee of the ational Vaccine Advisory Committee, led by Dr. Barry Bloom, to de rmine future vaccine needs of the country and to enter into open dialo e with manufacturers. Dr. Robbins wants one or more members of e ACIP to participate on that subcommittee.

He then briefly discussed his program's work with CDC, HC , and the National Governors Association in getting the Vaccines fo Children program off the ground.

In follow-up discussion on Dr. Henderson's and Dr. Robbin presentations, Dr. Henderson said that as far as prioriti beyond childhood immunization in the United States are concerned two areas stand out: adult immunization and global initiatives, su as participation in the global effort to eradicate polio and nvolvement in the global Children's Vaccine Initiative. He also said h expected such activities to be added within 2 or 3 years. Dr. Henderso was also encouraged to stimulate insurance companies to cover adul immunizations and HMOs to increase coverage of adult immunizations as w l. Dr. Robbins acknowledged that recordkeeping is a real problem but that the National Vaccine Program is encouraging the Robert Wood J nson Foundation and others to provide grant support for innova ve projects to develop registries and data systems to help with this. Dr. Orenstein said that hepatitis B would be incorporated into the Vacc es for Children Program and into the Childhood Immunization Init tive. However, the targeted coverage rate for 1996 would be 70% or this vaccine, not 90%.

better protection against mild disease with four doses; p: :ection looks similar for more severe disease. An analysis using data :)m the supplementary pertussis surveillance system does suggest l :ter protective efficacy among children who received four dose: The absolute increase in efficacy was 5%, from 86% (3 doses) 91% (4 doses).

Dr. Steve Rosenthal, NIP, discussed what adverse events a: associated with the fourth dose of DTP and examined whether, if any, ney differ in severity or frequency from those following other doses. izures-- primarily febrile seizures--following DTP4 vaccination we: reported more frequently compared with doses 1-3. In the Vaccine verse Events Reporting System (VAERS), seizures following DTP administ ed at 15-24 months of age are reported more frequently compared with P given in the first year of life. Estimated coverage for DTP4 is 1 er: 44% compared with 69% for DTP3, from the 1991 National Health nterview Survey. Therefore, rates of seizures temporally associat with DTP4 are likely to be higher. However, the peak incidence of brile seizures in children corresponds with the recommended age f DTP4 administration. Reports of these and other adverse event temporally associated with vaccination at 15-24 months of age should ecrease as the use of acellular pertussis vaccine increases. VAERS 11 monitor these trends.

Dr. Norman Begg, a consultant epidemiologist with the Pub c Heath Laboratory Service in the United Kingdom, summarized the perience of that country with the pertussis schedule, which is three ses, given at 2. 3. and 4 months of age. He said that 93% of U.K. chil en are immunized with DTP. He said that their concern is that t ugh three doses provide reasonable protection, they may not really enough and that the country is "getting away with it" because of "na ral boosting" from epidemics in the seventies and eighties. The countr is now exploring the immunogenicity and safety of giving a fourt dose. If instituted, it will be with an acellular vaccine.

Dr. James Cherry from UCLA said the United States has the)est immunization program in the world as far as pertussis is)ncerned. He presented data from two antibody studies showing that ar body levels drop off rather markedly after the third dose. Were the ited States to give up the fourth dose of DTP, he said that pertussi: will increase by 17% in 2- to 4-year-olds, and there will be 2,000 addi ional cases. Of these, 10% will have a sibling under 6 months of age) is not immune, perhaps leading to 160 cases in this age-group. nce 70% of cases in this age-group get admitted to the hospital, ho: italization costs alone would increase by $1 million a year.

In terms of the epidemiology of pertussis in the United ates, Dr. Cherry said that pertussis is very common in the populat and we are all being exposed every day in the United States to it. gA antibody studies indicate widespread infection. In short, he fel the United

Summary of Agreed-Upon Actions

1. Dr. Jay Wenger said he would look into circulating P t II of the draft ACIP statement on meningococcal disease to the merican College Health Association.

2. ACIP members and liaison representatives are to retu comments on the draft ACIP varicella statement to Dr. Holmes or . Kovach by October 27.

3. ACIP members and liaison representatives are to retu comments on the meningococcal draft ACIP statement to Dr. Wenger r Ms. Kovach by Oct. 27.

4. Mr. Malone will look into whether each combination v cine needs to be listed on the ACIP-provided schedule of vaccines or the Omnibus Budget Reconciliation Act).

5. Dr. Markowitz will prepare a succinct summary of her resentation on changing the recommended age for the first dose o MMR to 12-15 months so that it can be combined with a paragraph a iculating ACIP's recommended change and published in the *MMWR*.

6. Ms. Kovach is to resolve the best date for the June 94 meeting and notify members.