EPIDEMIOLOGY SECTION

CONNECTICUT EPIDEMIOLOGIST

STATE OF CONNECTICUT DEPARTMENT OF HEALTH SERVICES
FREDERICK G. ADAMS, D.D.S., M.P.H., Commissioner

AUGUST, 1988
VOLUME 8 NO. 3

ENHANCED INACTIVATED POLIO VACCINE

The Immunization Program has a supply of the new enhanced IPV vaccine. Its use is limited to patients for whom live virus vaccine is contraindicated. Such patients include those with immune deficiency disease, such as agammaglobulinemia, AIDS, or altered immune status due to other diseases or immunosuppressive therapy. In addition when polio immunization is indicated for family members and other close contacts of patients with contraindications, IPV rather than OPV, should be used.

The most notable differences between the old and new inactivated vaccines are:

1. The primary series consists of only three doses instead of four beginning at two months of age. The first two doses should be administered eight weeks apart, followed by a third dose twelve months after the second.

2. Enhanced IPV dosage is 0.5 ml compared to 1.0 ml with conventional IPV.

3. Enhanced IPV is a human diploid cell-derived vaccine that contains trace amounts of streptomycin and neomycin. Administration of this vaccine is not indicated in individuals who have had anaphylatic reactions to these drugs.

Additional information is contained in the ACIP supplement statement dated 12/11/87. If you have any questions regarding this new vaccine, please contact the Immunization Program at 566-5657.

RECOMMENDED IMMUNIZATION SCHEDULE
- 15 Month Olds -

The Immunization Practices Advisory Committee (ACIP) to the USPHS recommends the simultaneous administration of MMR, DTP (4th dose) and OPV (3rd dose) at 15 months of age based on a large, randomized double blind trial involving 815 children.

The main advantage to this regimen is an increase in the number of children completing the primary series at an earlier age.

The Preventable Diseases Division continues to advocate the adoption and maintenance of this regimen.

Influenza Vaccine 1988-89

This year's flu vaccine is a tri-valent preparation and contains the following strains: A/Taiwan/1/86, A/Sichuan/2/87 and B/Victoria/2/87. Manufacturers of influenza vaccine include:

Connaught (Whole or Split)	1-800-822-2463
Parke Davis (Split)	1-800-223-0432
Wyeth (Split)	1-800-321-2304

87-88 vaccine should not be used.

TITLE XXI OF THE PUBLIC HEALTH SERVICE ACT
NATIONAL CHILDHOOD VACCINE INJURY ACT: REQUIREMENTS FOR PERMANENT VACCINATION RECORDS AND FOR REPORTING OF SELECTED EVENTS AFTER VACCINATION

Since March 21, 1988, health-care providers who administer certain vaccines and toxoids are required by law to record permanently certain information and to report certain events. The vaccines and toxoids to which these requirements apply follow: diphtheria and tetanus toxoids and pertussis vaccine (DTP); pertussis vaccine (P); measles, mumps, and rubella single-antigen vaccines and combination vaccines (MMR, MR); diphtheria and tetanus toxoids (DT); tetanus and diphtheria toxoids (TD); tetanus toxoid (T); poliovirus vaccine live, oral (OPV); and poliovirus vaccine inactivated (IPV). Requirements also will apply to DTP combined with inactivated polio virus vaccine (DTP/Polio) if it becomes available.

TABLE 1. Reportable events following vaccination

Vaccine/Toxoid	Event	Interval from Vaccination
DTP, P, DTP/Polio Combined	A. Anaphylaxis or anaphylactic shock	25 hours
	B. Encephalopathy (or encephalitis)*	7 days
	C. Shock-collapse or hypotonic-hyporesponsive collapse*	
	D. Residual seizure disorder*	(See Aids for Interpretation)
	E. Any acute complication or sequela	No limit
	F. Events in vaccinees described in manufacturer's package insert as contraindications to additional doses of vaccine (such as convulsions)	(See package insert)
Measles, Mumps, and Rubella; DT, Td, Tetanus Toxoid	A. Anaphylaxis or anaphylactic shock	24 hours
	B. Encephalopathy (or encephalitis)*	15 days for measles, and rubella vaccines;
	C. Residual seizure disorder*	7 days for DT, Td, and T Toxoids (See AIDS for Interpretation*)
	D. Any acute complication or sequela (including death) of above events	No limit
	E. Events in vaccinees described in manufacturer's package insert as contraindications to additional doses of vaccine	(See package insert)
Oral Polio Vaccine	A. Paralytic poliomyelitis	
	-in a non-immunodeficient recipient	30 days
	-in an immunodeficient recipient	6 months
	-in a vaccine-associated community case	No limit
	B. Any acute complication or sequela (including death) of above events	
	C. Events in vaccinees described in manufacturer's package insert as contraindications to additional doses of vaccine	(See package insert)
Inactivated Polio Vaccine	A. Anaphylaxis or anaphylactic shock	24 hours
	B. Any acute complication or sequela (including death) of above event	No limit
	C. Events in vaccinees described in manufacturer's package insert as contraindications to additional doses of vaccine	(See package insert)

*Aids for Interpretation: Shock-collapse or hypotonic-hyporesponsive collapse may be evidenced by signs or symptoms such as decrease in or loss of muscle tone, paralysis (partial or complete), hemiplegia, hemiparesis, loss of color or turning pale white or blue, unresponsiveness to environmental stimuli, depression of or loss of consciousness, prolonged sleeping with difficulty arousing, or cardiovascular or respiratory arrest.

Residual seizure disorder may be considered to have occurred if no other seizure or convulsion unaccompanied by fever or accompanied by a fever of less than 102° F occurred before the first seizure or convulsion after the administration of the vaccine involved, AND, if in the case of measles-, mumps-, or rubella-containing vaccines, the first seizure or convulsion occurred within 15 days after vaccination OR in the case of any other vaccine, the first seizure or convulsion occurred within 3 days after vaccination, AND, if two or more seizures or convulsions unaccompanied by fever or accompanied by a fever of less than 102° F occurred within 1 year after vaccination.

The terms seizure and convulsion include grand mal, petit mal, absence, myoclonic, tonic-clonic, and focal motor seizures and signs. Encephalopathy means any significant acquired abnormality of, injury to, or impairment of function of the brain. Among the frequent manifestations of encephalopathy are focal and diffuse neurologic signs, increased intracranial pressure, or changes lasting at least 6 hours in level of consciousness, with or without convulsions. The neurologic signs and symptoms of encephalopathy may be temporary with complete recovery, or they may result in various degrees of permanent impairment. Signs and symptoms such as high-pitched and unusual screaming, persistent unconsolable crying, and bulging fontanel are compatible with an encephalopathy, but in and of themselves are not conclusive evidence of encephalopathy. Encephalopathy usually can be documented by slow wave activity on an electroencephalogram.

The health-care provider must refer to the CONTRAINDICATION section of the manufacturer's package insert for each vaccine.

Requirements for Recording: All health care providers who administer one or more of these vaccines or toxoids are required to ensure that there is recorded in the vaccine recipient's permanent medical record (or in a permanent office log or file) the date the vaccine was administered, the manufacturer and lot number of the vaccine, and the name, address, and title of the person administering the vaccine. The term health-care provider is defined as any licensed health-care professional, organization, or institution, whether private or public (including federal, state, and local departments and agencies), under whose authority vaccines are administered.

Requirements for Reporting: Health-care providers are required to report to the U.S. Department of Health and Human Services (DHHS) selected events occurring after vaccination. Reportable events applicable to the previously mentioned vaccines and toxoids are shown in Table 1 and include events described in the vaccine manufacturer's package insert as contraindications to receiving additional doses of the vaccine.

TABLE 2. Reporting of events occurring after vaccination

	Vaccine Purchased with Public Money	Vaccine Purchased with Private Money
Who Reports:	Health-care provider who administered the vaccine (Health care providers attending to an adverse reaction must report to the provider who administered the vaccine)	Health-care provider who administered the vaccine (Health care providers attending to an adverse reaction must report to the provider who administered the vaccine)
What Products To Report:	DTP, P, Measles, Mumps, Rubella, DT, Td, T, OPV, IPV, and DTP/Polio Combined	DTP, P, Measles, Mumps, Rubella, DT, Td, T, OPV, IPV, and DTP/Polio Combined
What Reactions To Report:	Events listed in Table 1 including contraindicating reactions specified in manufacturers' package inserts	Events listed in Table 1 including contraindicating reactions specified in manufacturers' package inserts
How To Report:	Initial report taken by State Health Department. Immunization Program (566-5657) completes CDC form 71.19	Health-care provider completes Adverse Reaction Report-FDA form 1639 (include interval from vaccination, manufacturer, and lot number on form)
Where To Report:	MSAEFI/IM (E05) Centers for Disease Control Atlanta, GA 30333	Food and Drug Administration (HFN-730) Rockville, MD 20857
Where To Obtain Forms:	State Immunization Programs	FDA and publications such as FDA Drug Bulletin

Methods for Reporting: Adverse events occurring after receipt of publicly purchased vaccines, supplied by the Connecticut Immunization Program, are reported by the health care provider through the Immunization Program to the Centers for Disease Control (CDC) on CDC form 71.19 (Report of Adverse Events Following Immunization). Events occurring after receipt of a privately purchased vaccine usually are reported directly to the Food and Drug Administration (FDA) on FDA form 1639 Adverse Reaction Report by the health-care provider. FDA form 1639 can be obtained directly from Food and Drug Administration, HFN-730, Rockville, Maryland 20857. The form is also printed in the FDA Drug Bulletin, the physician's edition of the Physicians' Desk Reference, USP Drug Information for Health Care Providers, and AMA Drug Evaluations and can be duplicated.

Health care providers are requested not to provide the names and other personal identifiers of patients on FDA form 1639. However, for publicly purchased vaccines such information will be reported to the Immunization Program, who in turn will remove the personal identifiers before submitting the form to CDC.

FEBRILE RASH ILLNESS-NEW JERSEY

Since May 1988, The New Jersey Department of Health has been investigating more than 300 reports of a febrile rash illness, clinically and epidemiologically compatible with measles. Laboratory confirmation is expected.

Most of these reports have occurred in Burlington and Ocean County high school students, who were immunized prior to 1980 or under 15 months of age. We are concerned that children from New Jersey may be vacationing in Connecticut and may transmit measles while here.

We request that any febrile rash illness consistent with measles be reported in order that we can begin the epidemiologic process immediately.

Please arrange to draw an acute serologic specimen on all possible measles cases as well as a convalescent specimen 10-14 days later in order to establish a definitive diagnosis. The Immunization Program of the Connecticut Department of Health Services will investigate all suspect cases. Please report suspect measles cases to 566-5657.

IT'S HOT, SO KEEP IT COOL (VACCINE, THAT IS)

We are always concerned about the need to preserve the cold chain, when it comes to vaccine. Obviously, keeping vaccines cool becomes even more of an issue in summer than at other times of the year.

The Immunization Program's biologics officer makes every effort to insure that vaccine is packaged with enough refrigerant (dry ice or cold packs) to preserve the integrity of the cold chain, for up to 48 hours. If vaccines shipped by our program are in transit for more than 48 hours and there is any question about the integrity of the cold chain please contact the Immunization Program at 566-5657.

It is important that health care providers recognize the requirement to store (immediately upon receipt) and maintain the vaccines as stated in the the package insert. Providers must safeguard against exposure to temperature excesses.

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