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WEEKLY EPIDEMIOLOGICAL SURVEILLANCE REPORT

บทความ

IMPORTED PARALYTIC POLIOMYELITIS

UNITED STATES OF AMERICA. — In May 1986, a 29-year-old Californian woman contracted paralytic poliomyelitis while travelling in Asia. She had worked and travelled in Nepal from January through 2 May, and she visited Burma between 3 and 9 May. On 10 May, she travelled to Thailand, where she had onset of fever (a temperature of 38.9 °C), malaise, and a feeling of weakness lasting 1 day. On 16 May, she again had symptoms: fever (a temperature of 40.1 °C), headache, and low back pain. On 17 May, she experienced weakness in the lower extremities (right more than left), constipation, and urinary retention. On 19 May, she was unable to walk and was hospitalized in Bangkok. A flaccid paralysis of the lower extremities without sensory or bulbar involvement was noted. Cerebrospinal fluid contained 90 leukocytes, of which 93% were lymphocytes.

The patient returned to the United States on 6 June, confined to a wheelchair. On examination, she was noted to have flaccidity and no deep-tendon reflexes in the right lower extremity. Her sensory modalities were intact; constipation and urinary retention had resolved. Poliovirus type 1 was isolated from stool collected on 22 June and subsequently characterized as "wild-like" by genomic sequencing. Electromyography and nerve-conduction studies performed on 26 June were consistent with axonal neuropathy of poliomyelitis. The results of serological tests for immunoglobulin IgG, IgA, and IgM were within normal ranges. At 60 days after the onset of weakness, she had residual paralysis of the right leg below the knee.

The patient had an immunization history of 3 doses of inactivated poliovirus vaccine (IPV) in the late 1950s and 1 "sugar cube" (not known whether it contained a monovalent [MOPV] or a trivalent oral poliovirus vaccine [OPV]) at a mass clinic in the early 1960s. The patient had travelled previously in Asia and elsewhere, but had not received any doses of poliovirus vaccine before any departures.

MMWR EDITORIAL NOTE: The last cases of paralytic poliomyelitis acquired in the United States and caused by wild poliovirus occurred in 1979. From 1980 through 1985, 4 reported cases of paralytic poliomyelitis caused by wild virus occurred among United States citizens—all persons returning from developing countries. These imported cases represent 7% of the 55 cases of paralytic poliomyelitis reported during the 6-year period 1980-1985. The other 51 cases were vaccine-associated. During the preceding 6-year period (1974-1979), 9 (12%) of 78 reported cases of paralytic poliomyelitis were imported. Of the 13 cases of imported poliomyelitis reported between 1974 and 1985, 6 (46%) were over 18 years of age. The immunization status of the 13 patients was as follows:

(a) 7 had no history of poliovirus immunization;

(b) 4 had received 1 or 2 doses of poliovirus vaccine (1 had had 2 doses of OPV; 2, 1 dose of OPV; and 1, 1 dose of IPV); and

(c) 2 had completed at least a primary series (1 with 3 doses of OPV and the other with 5 doses of IPV, 3 doses of MOPV, and 1 dose of OPV).

In addition, some inappropriately immunized United States residents and others may become infected asymptomatically while in an area with endemic poliomyelitis and may excrete wild poliovirus temporarily after entering the United States.

Travellers to countries with endemic or epidemic poliomyelitis should be fully immunized. The only countries currently considered free of endemic wild poliovirus circulation are Australia, Canada, Japan, New Zealand, the United States and most of Eastern and Western Europe. Before visiting other countries, every traveller should have received, at a minimum, a complete primary series of immunizations. In addition, the Immunization Practices Advisory Committee (ACIP) recommends that persons who have previously completed a primary series receive an additional dose of poliovirus vaccine, generally as OPV, before travel.

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วัคซีน

EXPANDED PROGRAMME ON IMMUNIZATION

Measles: an unnecessary epidemic in 1986

UNITED KINGDOM. — A safe and effective measles vaccine which provides long-term immunity has been available since 1968. If existing Scottish Home and Health Department (SHHD) policy on measles immunization (1984) was implemented, measles could be eradicated. Instead, Scotland continues to have more cases annually than the whole of the United States of America, with 4 595 cases notified in Scotland during 1985 against 2 813 in the United States; 1986 is proving to be an epidemic one, with 4 828 cases reported by the end of June compared with 4 595 in the whole of 1985 or 2 842 cases in the comparable half year *(Table 1)*.

Table 1. **Measles: notifications recorded for Greater Glasgow Health Board (GGHB), Scotland, and England and Wales, 1980-1986**

Year	GGHB	Scotland	England and Wales
1980	776	6 646	139 485
1981	520	4 698	52 974
1982	1 727	10 581	94 195
1983	488	6 193	103 700
1984	815	4 897	62 080
1985[a]	580	4 595	
weeks 1-26	(423)	(2 842)	
1986[a] (weeks 1-26)	(517)	(4 828)	

[a] Provisional figures.

Measles is a highly infectious disease which can be unpleasant and occasionally life-threatening. In 4% of cases it is reported to cause a severe illness and in 44% a moderately severe one. A report from Fife indicated that 1 in 200 cases required hospital admission and of these 42% had respiratory trouble, 28% otitis, and 20% convulsions. The fact that 1 in 5 000 affected persons still dies, irrespective of treatment, indicates that measles is not becoming a less severe clinical condition. Indeed, it remains one of the more hazardous childhood diseases still at large in the community.

All children should receive measles vaccine in the second year of life, the only exceptions being those with compromised immunity, which is exceedingly rare in this age-group. Special consideration regarding measles immunization is needed in some situations and these are listed in *Table 2*. All too often the non-contraindications, which are listed also, are not recognized as such and vaccine is withheld.

Table 2. Considerations regarding measles immunization

Febrile illness	— delay immunization for a short period only
Allergies:	
Egg hypersensitivity	— only relevant if anaphylactoid
Neomycin/polymixin (used in manufacture)	— rarely relevant
Altered immunity	
Leukaemia, lymphoma, active tuberculosis, steroids	— exceedingly rare in second year of life
Pregnancy	— delay till fourth month if possible
History of convulsions (including family history)	— immunize with measles-specific immunoglobulin or anticonvulsant cover
Exposure to measles	— immunize within 72 hours (immunoglobulin up to fifth day)
Past history of measles	— ignore and immunize (history unreliable and immunization harmless in the already immune)
"Contraindications" which *need not* be valid:	
Upper respiratory tract infection	
Asthma/eczema/other allergies	
Dislike of eggs	
Previous history of measles	
Exposure to measles	

(อ่านต่อหน้า 585)

Expanded Programme On Immunization Measles: an unnecessary epidemic in 1986

(ต่อจากหน้า 580)

In a practice which is situated in the South-East district of Glasgow and is responsible for the care of about 3 000 patients, 3 consecutive analyses of the children registered have been made. The first study was of those children (247) born in the period 1975-1980 and registered in 1982. The second embraced those born in 1981-1982 (81) and registered in 1984 while the third took in those born in 1983-1984 (87) and registered in 1986. For the first 2 study periods the measles vaccine uptake was 90% and for the third it was 100%. These and the comparable figures for the South-East district of Glasgow, for the Greater Glasgow Health Board (GGHB) and for Scotland are given in *Table 3*.

Table 3. Percentage uptake of measles vaccine, Scotland, 1975-1984

Children born in	General practice surgery South-East Glasgow	South-East District GGHB	GGHB	Scotland
1975	90	—	—	—
1976		—	—	—
1977		—	—	—
1978		—	—	—
1979		—	—	—
1980		66	66	60 57
1981	90	74	72	64
1982		77	76	—
1983	100	81	77	—
1984		—	—	—

One of the reasons for the consistently high uptake of measles vaccine has been the use throughout the study of the GGHB computer-based, immunization recall scheme which automatically contacts the parents of children by postcard and gives them an appointment for the children to attend an immunization clinic in the second year of life. The improvement in the percentage uptake in 1983-1984 (third period) reflects the change in the emphasis of policy in the SHHD guidelines on immunization. The virtual absence of children excluded by reason of contraindications is noteworthy.

Important too is the continuing commitment of the whole primary-care team to promote immunization by encouraging the hesitant to come and talk about it. In this context it is recognized that many parents who delay or avoid immunization of their child have difficulty in accepting the responsibility of decision-making. This manifests as anxiety, with consequent failure to bring the child for immunization, and frequently the excuse given is that "the child is unwell". If the practitioner sees and examines such a child and indicates that he or she is fit for immunization, then in the eyes of many parents the general practitioner has undertaken the responsibility for the decision to immunize and the parents generally agree with the procedure.

Given interest and effort, a consistently high uptake of measles vaccine has been achieved in the general practice in which the 3 studies were conducted. Implementation of the 1984 SHHD guidelines has resulted in 100% uptake over a 2-year period. Unless the general level of measles immunization in the community is increased, measles will continue to be an "unnecessary" disease.

EDITORIAL NOTE: In a WHO review of indications and contraindications used in immunization programmes,[1] it was noted that in many countries immunization coverage is still less than optimal, one of the reasons being inappropriate application of contraindications. Comparing risks of adverse reactions after immunization with risks of complications following natural disease, it was concluded that the decision to withhold the benefits of immunization from an eligible child should not be taken lightly, particularly when the incidence of vaccine-preventable diseases is still high. Low-grade fever, mild respiratory infection, or diarrhoea should not be considered a contraindication to immunization.

The Member States in the WHO European Region have adopted the target of measles elimination by 1990.[2] When in spite of high immunization coverage rates, the incidence of measles remains high, doubts may be raised about the efficacy of the vaccine. The cheapest and most useful means of providing quick and reliable answers may be a vaccine efficacy study[3] as part of outbreak investigation and control measures.

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สถานการณ์โรค

โรคติดต่ออันตราย

อหิวาตกโรค

เอเชีย		ป่วย	ตาย	อาฟริกา		ป่วย	ตาย
อิหร่าน	16-22 พย.	23	1	มาลี	1-25 พย.	74	16
	23-29 พย.	13	0	ยุโรป		ป่วย	ตาย
				สหราชอาณาจักร	1-7 พย.	2[I]	0

I = Imported cases

ไข้เหลือง

อาฟริกา		ป่วย	ตาย
กีนี	29 ตค.	5	2
มาลี	21 กย.-16 พย.	304	144

WHO : Weekly Epidemiological Record: 1987,62,376