WORLD HEALTH ORGANIZATION
ORGANISATION MONDIALE DE LA SANTÉ

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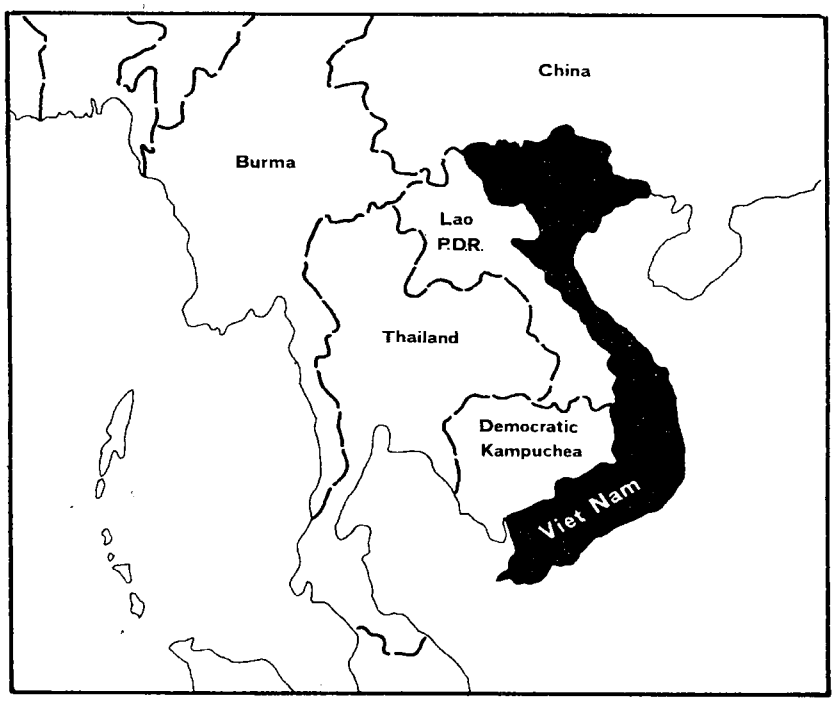
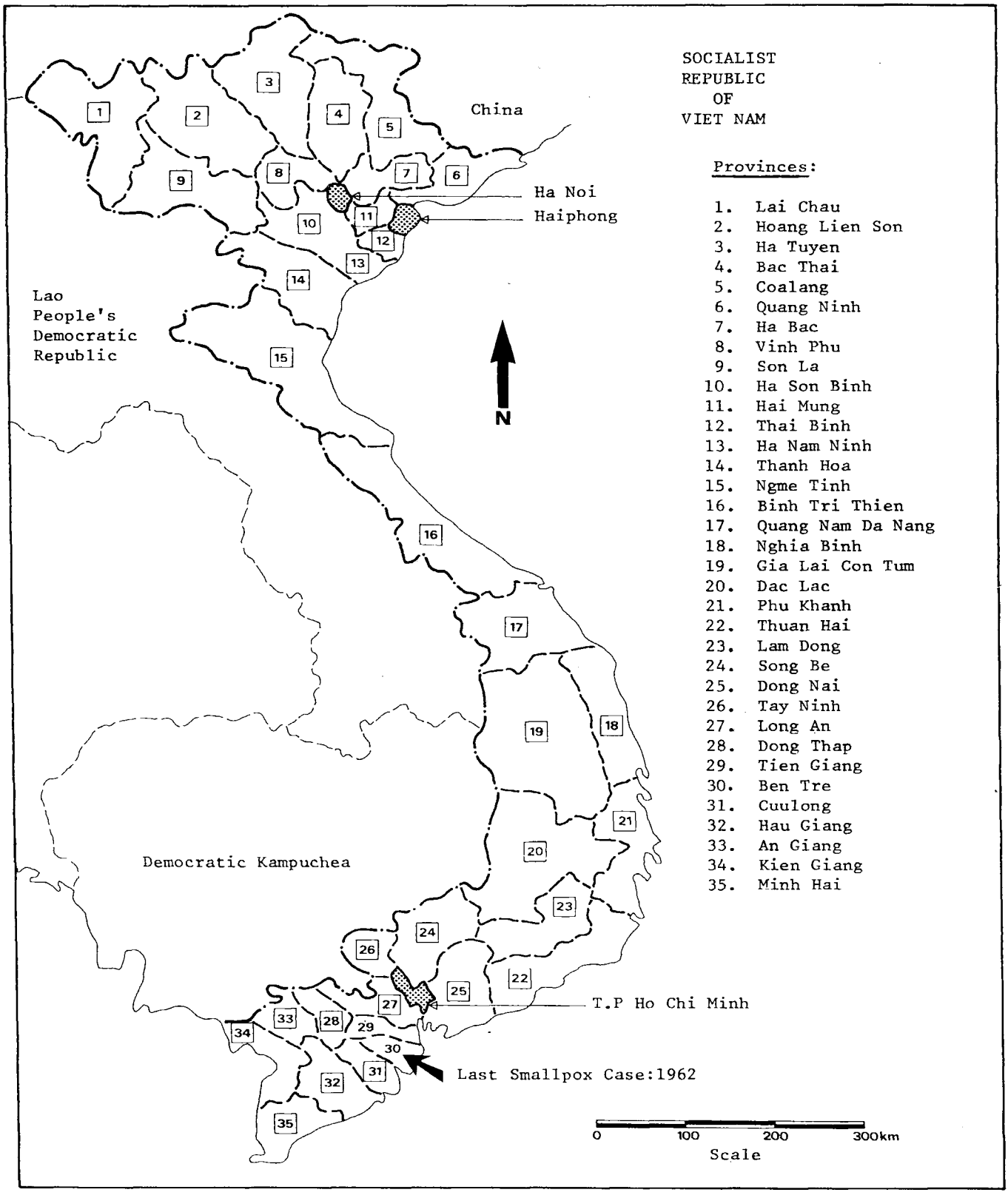
REPORT TO THE GLOBAL COMMISSION FOR CERTIFICATION OF SMALLPOX ERADICATION

SOCIALIST REPUBLIC OF VIET NAM



MINISTRY OF HEALTH
SOCIALIST REPUBLIC OF VIET NAM

WORLD HEALTH ORGANIZATION
Regional Office for the Western Pacific



Provinces:

1. Lai Chau
2. Hoang Lien Son
3. Ha Tuyen
4. Bac Thai
5. Coalang
6. Quang Ninh
7. Ha Bac
8. Vinh Phu
9. Son La
10. Ha Son Binh
11. Hai Mung
12. Thai Binh
13. Ha Nam Ninh
14. Thanh Hoa
15. Ngme Tinh
16. Binh Tri Thien
17. Quang Nam Da Nang
18. Nghia Binh
19. Gia Lai Con Tum
20. Dac Lac
21. Phu Khanh
22. Thuan Hai
23. Lam Dong
24. Song Be
25. Dong Nai
26. Tay Ninh
27. Long An
28. Dong Thap
29. Tien Giang
30. Ben Tre
31. Cuulong
32. Hau Giang
33. An Giang
34. Kien Giang
35. Minh Hai

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1. BASIC DEMOGRAPHIC DATA

1.1 Geography

1.1.1 Area and location

The Socialist Republic of Viet Nam is situated in the Indochinese peninsula of South-East Asia, between 8°30' and 23°22' Lat N and 102°10' and 109°30' Long E It has boundaries with the People's Republic of China to the north, with the Lao People's Democratic Republic and Democratic Kampuchea to the west and a coastline with the Pacific Ocean to the east and to the south (see map).

The total land area covers 332 689 square kilometres.

The present population (1977) is estimated at about 49 160 000 (males: 48%; females: 52%) in an area of 332 689 square kilometres, representing a density of about 148 per square kilometre; 79.4% of the population is concentrated in the fertile river deltas and coastal plains. The hilly and mountainous part of the country has a sparse population of 10% of the total population.

1.1.2 Climate

Situated between the Tropic of Cancer and the Equator, the Socialist Republic of Viet Nam is essentially a tropical country, but its climate varies considerably from region to region. It is marked by relatively constant temperatures, sudden changes of the monsoon and a regular rainy season. There are two seasons:

- a rainy season from May to November;

- a hot, dry season from November to April.

The temperature is from 21°C to 27° C. The average rainfall in the year is from 1332 mm to 2303 mm.

1.1.3 Land use

About 17 million hectares of the total land area are covered with forests; 4.9 million hectares are used for agricultural cultivation.

The remainder consists of grazing lands uncultivated and/or barren areas.

1.1.4 Topography

The country is topographically divided into three regions:

- The flat and fertile plain created by the alluvium of many big rivers;
- The hill-lands with fertile land and low mountains and hills, the average height is from 15 metres to 150 metres above sea level;
- The highlands with forests and high mountains of 1000 metres height above sea level.

1.1.5 Ethnic group

The Vietnamese are largely a homogeneous people, with their own culture and history of 4000 years in building and safeguarding the country.

The main group representing 84.4% of the population are the Kinh; 15.6% of the population represents about 60 different ethnic minority people.

The national language is Vietnamese.

1.1.6 Communication

The country has a rich network of various types of roads providing an adequate network of service communications between major centres. For many areas in the southern part the water transport remains the only means of movement.

The general characteristics of the population differ markedly between the north and the south because of the economic, social and political conditions that have obtained in the past.

TABLE 1

POPULATION DISTRIBUTION (1972)

	Northern Part*	Southern Part*
Land area	158 400 km^2	174.289 km^2
Population density	136 p/km^2	110 p/km^2
Rural population	80-85 %	65%
Urban population	15-20 %	35%

*Northern and southern parts defined as per division before 1975

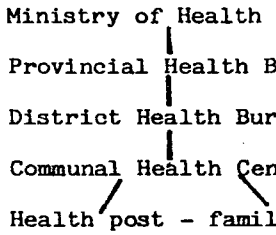
2. ADMINISTRATIVE STRUCTURE

At present, the country is divided into 35 provinces and three cities (Hanoi, as its capital; Haiphong; and Ho Chi Minh Ville). The provinces and cities are in turn divided into 488 districts consisting of 8984 communes, with an average population of 5000 to 6000 in each commune.

3. ORGANIZATION OF HEALTH SERVICES

The Ministry of Health is responsible for the organization of the health services of the country, including all preventive and curative measures, training of health manpower, medical research, and production and distribution of drugs.

The health services organization is based on the country's administrative structure:



There are different levels of services, from commune (1) to district (2) and province (3); at the central level (4), a number of agencies are operating under the direct authority of the Ministry.

3.1 Communal level

3.1.1 Primary health care is not institutionalized as in many other countries. In each family, there is a designated member of the Red Cross Society, trained for about 10 to 15 days by the communal and district health services to carry out basic health tasks. Thus each family has its own health activist/health promoter/family health worker with the following functions: building and maintenance of septic tanks, bathrooms and wells, first aid; he is in charge of the family medicine box and provides a family planning service.

Responsibility for health remains with individuals, families and the community, with the health services providing support and promoting self-reliance within the total system, to ensure success in the solution of basic health problems. The family, within the framework of the community, shapes all the national efforts in regard to health services.

3.1.2 The next level in the delivery of primary health care is: the health posts in workers' cooperatives staffed by one or two nurses. Cooperatives select among their members persons to be trained as nurses. Cooperative nurses receive about 18 months' training at the district and communal health centres. They are able to perform various tasks in health care delivery, such as health promotion, first aid, prevention and treatment of minor and most common diseases.

The primary health care workers are the first to notify communicable diseases to the communal health centre.

3.1.3 The communal health centre constitutes the first level of institutionalized health delivery structure. It is organized, constructed and financed by the commune. It is staffed with full-time professional health personnel and works under direct responsibility of commune authorities and under the technical guidance and support of health institutions at the district level.

One of the many activities of the communal health centre is immunization programmes and participation in the eradication of communicable and social diseases through the application of preventive and curative measures. The health centre is required to register all recognized cases of communicable diseases and to provide continuous observation and treatment according to diagnosis established by medical staff.

The communal health centre is staffed by a physician or an assistant physicien, 4-6 nurses and midwives, one pharmacy technician and one or more traditional physicians. Each centre has about 8 to 10 beds for short-term hospitalization.

3.2 District level

In each district (or precinct in urban centres) there is a health bureau, which supervises all activities for health protection in the district. Under its responsibility are a general hospital, a district hygiene, epidemiology and malariology station including a team of sanitarians for preventing epidemics and controlling malaria, various specialized dispensaries, polyclinics and a pharmacy.

The district health centres are the referral institutions for all communal health centres; they provide training for Red Cross workers and organize regular seminars for medical staff working in cooperative health and communal health stations.

3.3 Provincial level

In each province and in Hanoi, Haiphong, Ho Chi Minh Ville, there is a provincial health bureau which is responsible for all the provincial (or town) health institutions.

The medical service network facilities consist of: general hospitals, specialized clinics, polyclinics, hygiene and epidemiology stations, specialized dispensaries, a drug control service, a regional drug factory, several pharmacies and a training school for health personnel.

Provincial institutions are functionally integrated and serve as referral centres for the districts. Their purpose is to support the peripheral health services.

3.4 Central level

The central level constitutes the highly specialized peak of the national health delivery system services structure. This level is under the direct responsibility of the Ministry of Health. There are various medical and pharmaceutical research institutes, central general hospitals and specialized clinics, medical schools, a postgraduate training school, drug factories and pharmaceutical corporations, a central institute of hygiene and epidemiology and five schools for training of assistant physicians, X-ray and laboratory technicians. The central institutions provide the tools for technical evaluation, planning, programming and supervision of all the health services in the country.

All health care institutions are functionally and administratively integrated at each level under the responsibility of the respective health authorities. The functional relationship and referral linkages are well defined so that the health services of the higher level are charged with the technical and administrative guidance and supervision of the lower one.

The existing health system as described above was gradually built up in the northern part of the country after it became independent in 1945. At that time health services were accessible to only a small percentage of population in the urban areas. In the whole country, there were 47 hospitals with about 4000 beds, 100 physicians and 200 assistant physicians. After the partition in 1959 the Government of North Viet Nam designed a more precise policy on health services which still forms the basis for the present health system. The main objectives were that the health service should serve workers, mothers and children, contribute to raising the living standards, provide care for minorities, putting the emphasis on prevention while learning from traditional medicine and staying on its own resources. Despite tremendous constraints, the country succeeded in building up a large number of health institutions (see Tables 2 and 3 and Annex 1).

TABLE 2

NUMBER OF HEALTH INSTITUTIONS

	Before Indep.	North Viet Nam			Socialist Republic of Viet Nam
	1945	1955	1965	1975	1976
General/special hospitals	47	57	252	501	548
Infirmaries	-	17	350	895	912
Communal health centres	-	200	5 483	6 565	8 215
Epidemiological stations	-	54	29	26	38
Tuberculosis stations	-	-	24	21	33
Venereal disease stations	-	-	24	20	32
Malaria stations	-	18	22	25	37
MCH/family planning stations	-	-	28	26	38
Leprosaria	-	3	5	22	27

TABLE 3

NUMBER OF PERSONNEL IN THE HEALTH SERVICE

	North Viet Nam				Socialist Republic of Viet Nam
	1955	1960	1965	1970	1976
Doctors	108	409	1 514	3 818	6.296
Pharmacists	45	172	421	1 019	2 177
Dentists (1)	-	-	-	-	-
Auxiliary doctors	563	2 057	8 103	18 098	22 817
Auxiliary pharmacists	9	238	703	1 915	3 346
Nurses	10 257	29 117	35 928	47 990	43 258
Assistant midwives	2 031	13 149	14 786	12 565	9 290
Middle level medical and pharmaceutical technicians	-	-	-	-	1 458
Middle level midwives	-	-	-	-	206
Pharmacy technicians	233	1 151	2 150	10 373	9 720
Laboratory technicians	16	235	664	1 146	3 828

The health services in South Viet Nam as they existed before 1975 used to be more centralized and consisted of hospitals, combined maternity-infirmary/dispensaries (MID), health centres and health stations in villages and hamlets. Table 4 shows the number and type of health institutions existing in 1971.

TABLE 4

NUMBER OF HEALTH ESTABLISHMENTS IN SOUTH VIET NAM, 1971

Types of establishments	
Total (GENERAL AND SPECIALIZED HOSPITALS)	64
GENERAL HOSPITALS	56
National	5
Regional	8
Provincial	43
SPECIALIZED HOSPITALS	8
Maternity	2
Paediatrics	1
Mental	1
Tuberculosis	1
Venereal diseases	1
Communicable diseases	1
Cancer	1
OTHER FACILITIES	4 205
Leprosaria	13
Dispensaries for leprosy	33
Dispensaries in Saigon	36
Infirmaries, dispensaries, and maternity clinics in districts	
Villages and hamlets	1 497
Health stations in villages and hamlets	2 626

At the time the Government changed in 1975 there were about 600 government and 1900 private physicians. There was about one bed for every 1000 population.

Most of the health facilities were concentrated in the urban areas and were inadequate or virtually non-existent in the rural areas.

The policy of the Government since 1975 for the South has been to apply the same policy as in the North: to expand the delivery of health care to every village and encourage active participation of the people.

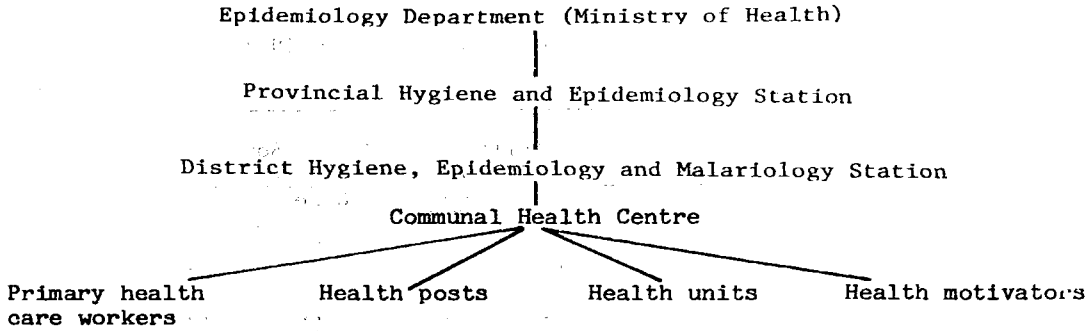
As of the end of 1976, 8300 physicians, 2384 pharmacists and 38 933 second level staff were being employed. A total of 1200 physicians graduate every year from the medical schools.

At present the health system could be characterized as adequate for the country's needs and resources.

4. REPORTING SYSTEM FOR NOTIFIABLE COMMUNICABLE DISEASES

The Government has assigned a high priority to the control of communicable diseases.

Reporting system for notifiable diseases:



As can be seen in the diagram each level of the health system has an epidemiology section. A diagnostic laboratory is attached to the hygiene and epidemiology station at the provincial level.

Due to the active participation of the population , disease reporting is well developed in the northern provinces (see Annex 2). As it has been introduced in the southern regions more recently, it will require some time to work as efficiently as in the North.

Disease reporting from communal and district level is either by telephone in case of an outbreak or in the case of common diseases weekly to the district which passes the reports on to the province every two weeks.

Epidemiological surveillance was carried out in South Viet Nam with the assistance of WHO before 1975 (project Viet Nam 2901/VNR ESD/001) from 1970 to 1976). Although the surveillance and reporting mostly concentrated on plague and cholera, the system was supposed to be sensitive enough to detect any smallpox cases should they occur. Weekly reports were sent from the provinces to the central level (Annex 3). The epidemiology unit of the Ministry of Health was further assisted till 1974 by four Korean preventive medicine teams (consisting of a senior physician, a public health specialist, three to four sanitarians, a laboratory technician and an administrator) and the United States Army health services.

Disease reporting used to be weekly (Annex 4) and monthly by the provincial/municipal medical officer. In case of (suspected) plague, cholera, smallpox or dengue information was sent immediately by telegramme or telephone.

The reporting system of other than the above-mentioned diseases was irregular and most figures referred to government hospital records which are the only reliable source of information. A monthly epidemiological bulletin was published by the Ministry of Health

5. SMALLPOX DATA

5.1 Number of smallpox cases and deaths reported by year (1951-1978)

The number of smallpox cases and deaths from 1951 to 1978 is represented in table 5:

TABLE 5

Incidence of smallpox in Viet Nam since 1951

Year	Total		North Viet Nam		South Viet Nam		Remarks
	Cases	Deaths	Cases	Deaths	Cases	Deaths	
1951	2722	1594	...	...	...	...	
1952	2235	1077	...	...	...	...	
1953	1582	705	...	...	...	...	
1954	3564	1510	...	...	...	...	
1955	1907	266	975	66	932	200	
1956	1008	86	752	30	256	56	
1957	472	68	389	13	83	55	
1958	35	11	3	-	32	11	
1959	13	3	-	-	13	3	
1960	-	-	-	-	-	-	
1961	-	-	-	-	-	-	
1962	1	-	-	-	1	-	single case notified in Ben Tre Province
1963-1968	-	-	-	-	-	-	

Note : ... : not available
- : nil.

5.2 Epidemiology of smallpox

No information is available regarding the epidemiology of smallpox in previous days and the last major epidemic in the northern and southern parts of the country.

5.3 Last case of smallpox

The last smallpox patient, named N. V. Nh, 48 years old, was notified in February 1962 in the village of Cam Son (Mo Cay district, Ben Tre Province). Measures taken included isolation and treatment of the patient, epidemiological surveillance, immunization and emergency revaccination of the villagers; the disease was thus controlled. No other case was notified.

5.4 Preventive measures against smallpox in Viet Nam

- Routine smallpox vaccination of children before the age of one, as well as children who have not been vaccinated or whose vaccination the previous year is not valid.
- Revaccination of the population every five years.
- Preparation of an overall vaccination campaign for the entire population in 1979-1980.

5.5 Reports of suspected smallpox cases

Table 6 lists the rumours received between 1968 and 1978.

TABLE 6

SMALLPOX RUMOURS

No.	Date	Name of patient	Place	Diagnosis	Disease	Laboratory investigation	Action taken
1	3.1.68	...	Village Vo-Xu Binh-Tuy	Korean Prev. medical mission	?	Pasteur Institute Saigon Results unknown	Village immunization of 260 people against smallpox
2	Late 1971	...	Da Nang General Hospital	Expatriate physician	CHP	Carried out place and results unknown	Village immunization No sign of smallpox
3	29.9.71	Bui-Thi-Me Female, 37	Noa Minh Village Guang Nam Province	United States medical team	CHP	Pasteur Institute Saigon Virus isolation (-)	Laboratory test by Dr Vu-Qui-Dai, M.D., Ph.D.
4	Jan. 1974	Nguyen Vam Thanh Male, 38	Village Pinom Tuyen-Duc province	Expatriate physician	?	WHO-Diagnostic Lab. EM (-) Virus isolation (-) *	No detailed story: field investigation by experienced health technician and Dr Castet, WHO epidemiologist. No smallpox found

Legends: *CDC - Atlanta
CHP - Chickenpox
... - Not known

In 1967, SME/WHO was informed that "to the best of the knowledge of the United States Army Preventive Medicine people, there was no smallpox in South Viet Nam in 1967. In 1968 the WHO Representative in Saigon informed the Regional Director of the WHO Regional Office for the Western Pacific that "the Ministry of Health confirms that since several years occurrence of smallpox has not been recorded in Viet Nam."

In the years 1965-1975, many smallpox rumours originated from volunteer expatriate physicians, not always well aware of the differential diagnosis between smallpox and chickenpox. WHO staff frequently investigated these rumours. No records were kept.

As can be seen from Table 6, all laboratory tests on suspect cases failed to confirm a smallpox diagnosis.

No records exist of the exact number of specimens investigated at the Pasteur Institute in Ho Chi Minh Ville.

6. SMALLPOX VACCINATION

6.1 Vaccination policy and organization

According to the World Health Statistics Annual for 1971, smallpox vaccinations in the south had been obligatory since 1954. Primary vaccination was performed at the age of 1 and revaccination followed every four years. Freeze-dried vaccine used from 1970 onwards was produced locally at the Pasteur Institute, Ho Chi Minh Ville (Saigon).

Vaccination against communicable diseases was not compulsory in the North but thanks to health education and full recognition by the people of its value in the prevention of diseases, high coverage of smallpox immunizations had been achieved.

An immunization programme against childhood diseases is being strengthened at present throughout the whole of the Socialist Republic of Viet Nam. The programme includes smallpox vaccination. The yearly production of 12 million doses of vaccine takes place at the Pasteur Institute in Ho Chi Minh Ville.

6.2 Vaccinations performed (1950-1977)

Table 7 shows the number of smallpox vaccination in South Viet Nam during the period 1955-1974, table 8 represents the vaccinations in doses in North Viet Nam during 1964-1976 and table 9 shows the number of smallpox vaccinations effected annually in Viet Nam between 1955 and 1977.

TABLE 7

SMALLPOX VACCINATIONS IN SOUTH VIET NAM, 1955-1974

Year	No. of vacc. per 000	Year	No. of vacc. per 000
1955	2 016	1968	3 347
1956	3 623	1969	4 197
1957	4 315	1970	2 507
1958	3 514	1971	3 577
1959-1965	...	1972	866
1965	4 169	1973	2 599
1966	1 094	1974	1 361
1967	3 506		

TABLE 8

VACCINATIONS IN DOSES IN NORTH VIET NAM, 1964-1976

Year	Vaccinations
1964	13 277 170
1965	11 302 485
1966	3 111 565
1967	5 578 275
1968	3 125 560
1969	6 480 975
1970	16 472 200
1971	7 482 000
1972	2 979 200
1973	3 959 220
1974	7 638 550
1975	21 089 300
1976	5 218 050

TABLE 9

Number of smallpox vaccinations effected annually in Viet Nam

Year	Number of vaccinations	Year	Number of vaccinations
1950	...	1964	6 325 000
1951	...	1965	6 945 300
1952	...	1966	1 497 000
1953	...	1967	2 023 700
1954	...	1968	1 461 900
1955	5 961 000	1969	876 000
1956	6 880 400	1970	6 827 200
1957	3 644 100	1971	2 547 000
1958	4 297 300	1972	1 153 600
1959	3 316 900	1973	876 500
1960	12 000 000	1974	2 105 000
1961	1 102 400	1975	5 689 400
1962	2 242 700	1976	3 238 500
1963	618 400	1977	3 713 200

Note : ... : Not available
1955-1974 : figures concerning North Viet Nam
1975-1977 : figures for the whole country

6.3 Vaccination coverage assessment

No data are available on vaccination assessment through scar surveys.

7. CHICKENPOX DATA

7.1 Reported chickenpox cases and deaths

In the table presented below, the number of chickenpox cases reported in the period 1970-1978 is shown.

7.2 Investigation of chickenpox deaths

No information is available on investigation of chickenpox deaths.

8. LABORATORY DATA

Only one specimen taken in the country in 1974 has been tested by a WHO collaborating centre. The specimen, taken from a smallpox suspect, was EM, PT and CAM negative (see Table 6).

9. VARIOLA VIRUS LABORATORY STOCK

The Ministry of Health has confirmed that only vaccinia virus is presently kept in stock in the Pasteur Institute in Ho Chi Minh City and Nha Trong.

10. SOURCES (see Annex 5)

TABLE 10

Incidence of chickenpox in Viet Nam since 1970

Month / Year	Total		January		Februarv		March		April		May		June		July		August		September		October		November		December	
	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D
1970	46506	15	4372	2	4169	1	4565	2	4325	2	4272	1	4113	-	3862	1	2107	-	2498	1	3725	1	4193	1	4305	3
1971	25129	5	2316	1	2207	1	2194	-	1989	-	2015	-	2039	-	2021	-	1869	-	1903	-	1957	-	2216	1	2403	2
1972	20606	7	2069	-	2112	1	1937	1	1856	-	1462	-	1129	-	1075	-	1329	1	1506	-	1961	1	2057	1	2113	2
1973	23072	10	2315	1	2101	-	2009	1	1987	1	2018	-	1872	-	1506	1	1561	-	1407	1	1972	2	2108	-	2216	3
1974	36882	24	3268	2	3212	2	3047	3	2984	1	2868	2	2787	1	3122	2	3057	1	3125	1	3089	2	3108	3	3215	4
1975	24902	9	2394	2	2134	1	2087	-	2062	1	1958	-	1875	-	1715	1	1879	-	1981	1	2164	2	2281	-	2372	1
1976	25284	18	3224	3	3638	2	2318	1	1486	-	1317	1	1829	2	1758	1	2465	-	2164	1	2241	2	1460	2	1384	3
1977	56883	28	2118	2	2430	1	8765	5	19981	8	1768	1	8182	3	5620	4	2691	1	1531	3	1422	-	1188	-	1187	-
1978	22068	5	1957	2	2378	1	2450	-	2645	-	2464	1	2058	1	2750	-	2216	-	3150	-						

Note : 1970-1974 : Figures concerning North Viet Nam

1975-1978 : figures concerning the whole country

1978 : temporary data

\- : nil.

ANNEX 1

NUMBER OF HOSPITAL BEDS PER 10 000 POPULATION

North Viet Nam					Socialist Republic of Viet Nam	
1955	1960	1965	1970	1974	1975	1976
10.5	13.2	18.1	23	25.0	17.2	19.8

NUMBER OF PHYSICIANS PER HEAD OF POPULATION

North Viet Nam					Socialist Republic of Viet Nam	
1955	1960	1965	1970	1974	1975	1976
128.885	59 077	11 973	5 691	3 811	5 587	5 278

INCIDENCE OF INFECTIOUS DISEASES IN NORTH VIET NAM

1964 - 1976

Year	1964		1965		1966		1967		1968		1969		1970		1971		1972		1973		1974		1975		1976	
Diseases	M	m	M	m	M	m	M	m	M	m	M	m	M	m	M	m	M	m	M	m	M	m	M	m	M	m
Typhoid fever and paratyphoid	12,33	0,45	10,37	0,40	4,03	0,15	7,92	0,10	2,08	0,07	2,48	0,16	5,04	0,28	1,10	0,08	2,13	0,09	0,96	0,05	0,78	0,02	0,52	0,012	0,94	0,02
Diarrhoeal diseases	1821,40	4,58	1709,88	2,76	1068,69	3,04	875,11	3,11	598,89	1,11	666,13	3,58	1074,77	6,09	820,13	1,91	761,94	2,97	992,92	1,64	762,00	1,20	711,02	0,55	744,247	1,21
Dysentery bacterial and amoebic	295,81	0,52	258,16	0,47	238,08	0,41	147,11	0,27	114,31	0,70	182,50	1,15	420,55	4,05	303,92	1,91	372,89	5,11	671,78	3,56	625,76	4,68	350,01	2,00	306,32	1,67
Poliomyelitis	1,65	0,06	0,61	0,03	0,54	0,04	0,43	0,01	0,07	0,009	0,55	0,14	0,54	0,04	0,40	0,01	1,01	0,07	0,99	0,05	0,07	0,04	0,75	0,017	0,15	0,007
Viral hepatitis	12,33	0,11	8,91	0,08	9,55	0,19	8,50	0,11	12,82	0,03	46,75	0,15	69,06	0,83	35,01	0,18	46,85	0,26	39,01	0,29	60,70	0,17	45,10	0,14	45,31	0,16
Influenza	1319,76	0,27	558,44	0,32	991,01	0,14	1407,93	0,49	1394,98	0,29	1053,81	0,36	14726,28	3,07	918,86	0,91	1439,27	0,59	3202,64	0,42	1858,63	0,12	...	...	...	...
Measles	332,93	0,68	347,23	0,98	376,83	0,68	334,33	0,28	741,38	0,98	670,00	2,64	504,77	1,28	157,22	0,14	251,06	0,64	191,99	0,34	692,41	2,31	...	...	...	...
Diphtheria	9,20	0,78	3,24	0,34	2,94	0,54	0,84	0,15	0,45	0,05	0,87	0,24	2,02	0,53	1,68	0,24	1,22	0,46	3,71	0,58	2,98	0,45	...	...	...	...
Whooping cough	414,17	0,66	550,27	1,10	456,46	1,62	243,00	0,39	340,47	0,14	464,31	0,75	452,62	0,52	196,70	0,50	199,76	0,48	288,70	0,19	385,89	0,07	...	...	...	...
Viral encephalitis	3,57	0,80	2,59	0,81	3,51	0,90	4,30	1,40	3,03	0,67	8,94	1,69	22,04	4,98	10,10	1,81	18,84	3,82	8,07	1,13	12,25	2,86	...	...	...	...
Rabies[1]	49,96	0,68	97,34	0,31	48,97	0,64	41,08	0,40	48,20	0,58	17,26	1,11	32,24	1,47	29,31	0,62	29,42	0,40	79,62	1,44	97,73	1,06	...	...	...	...

[1] Morbidity rate: number of people vaccinated before being bitten by suspect animals.

M: morbidity m: mortality

ANNEX 3

Republic of Viet Nam
Ministry of Health
Department of Preventive Medicine
No 699 Tran Hung Dao Bd
Saigon

No. 14/BQ

WEEKLY BULLETIN OF EPIDEMIOLOGICAL SURVEILLANCE
WEEK OF 31 MARCH - 6 APRIL 1974

LOCALITIES	PLAGUE		CHOLERA	
	REPORTED C/D	CONFIRMED C/D	REPORTED C/D	CONFIRMED C/D
REGION I:				
DANANG	7/0			
QUANGNAM	2/0			
QUANGTIN	12/0			
THUATHIEN				
+Hue	16/1	9/0[a]		
-HuongThuy	2/0			
-HuongTra	2/0	1/0		
-PhongDien	1/0	1/0[a]		
-PhuLoc	5/1	1/0		
-PhuThu	1/0	1/0		
-PhuVang	2/0	1/0		
-QuangDien	1/0			
-VinhLoc	1/0			
REGION II:				
BINHDINH				
-AnTuc	6/0			
-BinhKhe	3/0			
-PhuCat	10/1	4/0		
-PhuMy	3/0	1/0		
+QuiNhon	38/1	16/0		
-TuyPhuoc	2/0	2/0		
-AnNhon	1/0	1/0		
PHUYEN	1/0	1/0		
REGION III:				
SAIGON			11/0	11/0
BIENHOA			1/0	1/0
-NhonTrach				
BINHDUONG				
-ChauThanh	2/0			
GIADINH			4/0	4/0
-GoVap			1/0	1/0
-ThuDuc			1/0	1/0
TOTAL :	118/4	39/0	18/0	18/0

[a] Includes 4 cases in Hue and 1 case in Phong Dien occurring in weeks 5, 7 and 9 but reported in week 14.

Notes: C = Cases
D = Deaths
Provinces: - = District
+ = City (town)

SAIGON, 10 APRIL 1974

ANNEX 4

ENGLISH TRANSLATION
MONTHLY REPORTING FORM FOR COMMUNICABLE DISEASES
IN SOUTH VIET NAM 1974
MONTH: _____ YEAR: 1974

I.C.D. Number	NOTIFIABLE COMMUNICABLE DISEASES	CASES	DEATHS	CONFIRMED CASES
	REQUIRE URGENT NOTIFICATION			
000	Cholera	139	2	139/2
020	Plague	1 695	112	261/12
050	Smallpox			
	Yellow Fever			
	REQUIRE ROUTINE NOTIFICATION			
001	Typhoid Fever[2,3]	3 669	28	2 782/28
002, 003	Paratyphoid Fever and other Salmonella infections[3]	173	1	
004	Bacillary dysentery[4]	14 704	3	
005	Food poisoning including Botulism[2]			
006	Amebiasis	7 535	3	
011	Pulmonary Tuberculosis			
030	Leprosy			
032	Diphtheria[4]			
033	Whooping Cough[4]			
034	Scarlet Fever and Streptococci sore throat			
036.0	Meningococcal meningitis[2,4]			
037	Tetanus			
043	Poliomyelitis, acute[4]			
055	Measles[4]			
067-4	Mosquitoborne hemorrhagic fever[2,3]			
070	Infectious hepatitis[4]			
071	Rabies			
076	Trachoma, active			
078	Other viral diseases of Conjunctiva			
084	Malaria			
091	Early syphilis			
098.0	Acute genito-urinary gonococcal infection			
120	Schistosomiasis			
126	Anklostomiasis			
470	Influenza[4]			
062.0	Japanese B Encephalitis[4]			
	.....[1]			

Notes:
[1] Any other diseases which are not mentioned in the form may be also reported if necessary.
[2] Apart from urgently notifiable diseases it should be also reported urgently.
[3] The disease should be reported by the form BTN.
[4] The disease should be reported with indication of age and sex of the patients.

ANNEX 5

SOURCES

1. Dr C.W. Dixon, Smallpox Survey in the Western Pacific Region, WP/RC6/16. Unpublished document, 1954

2. Country Health Information System
Democratic Republic of Viet Nam, 1974

3. Country Health Information System
Republic of Viet Nam, 1974 (WPRO/VHS/HPU)

4. La Sante publique en Republique socialiste du Viet Nam, 1977

5. Assignment Reports, 1970-1975, WHO project UNR/ESD/001-E
Epidemiological Surveillance and Quarantine, Republic of Viet Nam

6. Correspondence between WPRO-WHO Staff, South Viet Nam, 1970-1976

7. Registry files on communicable diseases, Viet Nam-WPRO, 1965-1978

8. Assignment Reports, Dr Isagini, WHO Short-term Consultant, 1969, 1972, 1974
Production of freeze-dried smallpox vaccine.

9. Report of the Joint German Democratic Republic/WHO Mission to the Socialist Republic of Viet Nam, 5-21 September 1977, by Dr Doan Xuan Muou, Dr Nguyen van Dong, Dr S. Dittmann and Dr F. Assaad.

10. WR/WPC Activities - Reports on Viet Nam, 1970-1978

11. World Health Statistics Annual, 1951-1977

12. WHO Regional Committee WPR reports, 1951-1977

13. Western Pacific Regional Office quarterly reports, 1950-1970

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