

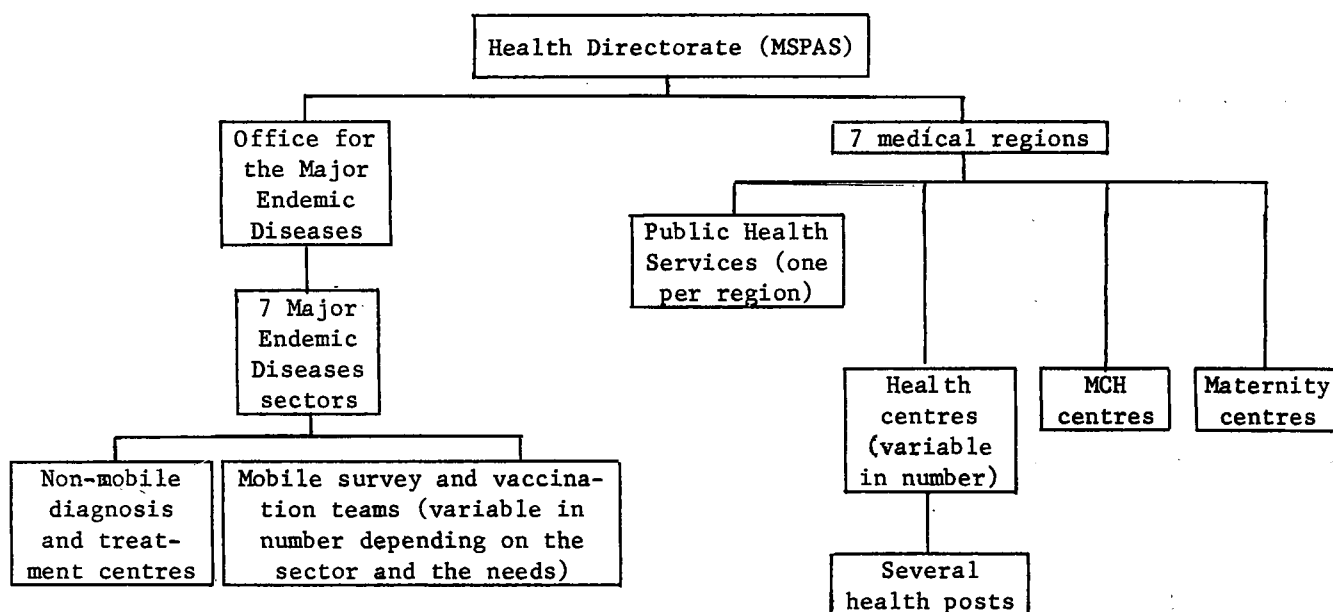


PART 1. IMPLEMENTATION OF THE PROGRAMME, 1967-1971

1.1 Organization

1.1.1 The smallpox eradication programme was organized, managed and evaluated by the Major Endemic Diseases Service under the supervision of the Health Directorate of the Ministry of Public Health and Social Affairs (MSPAS).

The Major Endemic Diseases Service coordinated the surveillance and vaccination activities carried out in the field by mobile and non-mobile health units.



1.1.2 The trend in the number of non-mobile health units and major endemic diseases sectors, by region, for 1967 and 1971.

Health units		Non-mobile health units							Major Endemic Diseases sectors			Major Endemic Diseases subsectors	
		Hospitals	Health centres	Health posts	MCH centres	Maternity centres	Public health services	Number	Sector headquarters	Number	Subsector headquarters		
Region	1967	3	1	40	25	5	1	0	-	-	-	-	
	1971	3	1	49	23	6	1	1	Dakar	-	-	-	
Casamance	1967	1	5	49	11	6	1	1	Bignona	-	-	-	
	1971	1	6	78	6	7	1	2	Kolda	-	-	-	
Diourbel	1967	1	5	33	17	8	1	1	Diourbel	-	Diourbel	-	
	1971	1	6	47	7	9	1	1		2	Louga	-	
Fleuve	1967	1	4	56	6	5	1	1	Podor	-	-	-	
	1971	1	4	61	6	5	1	1		-	-	-	
Eastern Senegal	1967	-	3	24	5	3	1	1	Tambacounda	-	Tamba	-	
	1971	-	3	27	3	3	1	1		2	Kédougou	-	
Sine-Saloum	1967	1	9	60	9	10	1		M'Bour				
	1971	1	8	76	10	10	1						
Thies	1967	1	5	40	13	6	1	1					
	1971	1	5	46	10	7	1	1					
TOTAL	1967	8	32	302	86	43	7	5		-			
	1971	8	33	384	65	47	7	7		4			

The Major Endemic Diseases sectors and subsectors organize and direct the activities for communicable disease control (including smallpox) within the specialized non-mobile units and by mobile teams.

The mobile teams carry out surveys and vaccinations and also attend to case-finding and outpatient treatment for certain diseases: trypanosomiasis, leprosy, onchocerciasis, trachoma and schistosomiasis.

## 1.2 Vaccination programme

1.2.1 Smallpox vaccination activities had been conducted in the country for a long time. Under the worldwide smallpox eradication programme, a mass smallpox vaccination campaign was organized throughout the country from the month of September 1967 onward.

The vaccine was supplied by USAID, Atlanta.

Vaccination technique used: PED-O-JET and bifurcated needle.

NUMBER OF ANNUAL VACCINATIONS FOR THE COUNTRY AS A WHOLE

Year	1967	1968	1969	1970	1971
Number of vaccinations	77 817	1 204 357	645 434	139 727	125 290

Between 1970 and 1971 the vaccination coverage was assessed by examination for vaccination scars.

These evaluations were carried out in several regions on selected samples of school-children in different schools.

VACCINATION COVERAGE FOUND BY DIFFERENT TEAMS IN SEVERAL AREAS

Zone	Team	Date	No. of subjects examined	Coverage (%)
Cap-Vert	USAID	01 1970	275	90-94
		03 1971	155	50
	Government	01 1970	3 766	74
	Public Health Service	05 1971	400	75
Thies-Sine Saloum	Government/WHO	09 1970	1 841	52

These contrasting results are attributable to differences regarding the place where the survey was carried out, the type of sample, and the method of sampling.

Surveys conducted in several other areas have shown that on the whole smallpox vaccination coverage, as assessed by the reading of scars, is about 50% of the population.

1.3 Surveillance and containment programme

1.3.1 NUMBER OF UNITS SUBMITTING WEEKLY AND MONTHLY RETURNS DIRECT TO THE  
MINISTRY OF PUBLIC HEALTH AND SOCIAL AFFAIRS, BY REGION AND BY YEAR

Region	Year				
	1967	1968	1969	1970	1971
Cap-Vert	4	4	4	4	4
Casamance	6	6	6	6	7
Diourbel	6	6	7	7	7
Fleuve	5	5	5	5	5
Eastern Senegal	3	3	3	3	3
Sine-Saloum	10	10	10	10	9
Thies	6	6	6	6	6
TOTAL	40	40	41	41	41

1.3.2 Quarantinable diseases are notified by cabling or telephoning the Major Endemic Diseases Directorate and by sending in weekly and monthly forms and annual returns.

Communications are routed as follows:

(a) From the health post to the health centre; if there is a suspected case of a quarantinable disease, it is generally the head of the health post who makes the journey, to inform the chief medical officer of the health centre; the latter checks the diagnosis and, if the case is confirmed, sends a telegram to the Ministry of Public Health and Social Affairs, at the same time informing the chief medical officer of the medical region.

(b) The epidemiological reporting forms are sent either via the head of the post himself or by other means from the health post to the health centre; at the health centre, the forms are checked and a return based on all the forms from health posts supervised by the centre is prepared and sent by mail to the Ministry of Public Health and Social Affairs.

It should be noted that quarantinable diseases are also notified by sector of the Major Endemic Diseases service, the structures and headquarters of which are shown in section 1.1.2.

1.3.3 No cases of smallpox were reported in Senegal between 1967 and 1971.

1.3.4 No village or town in Senegal reported suspected cases of smallpox during 1969 and 1970.

1.3.5 Information on the last outbreaks.

NUMBER OF CASES AND DEATHS FROM SMALLPOX RECORDED  
BY REGION AND BY YEAR

Region \ Year	1961		1962		1963		1964		1965	
	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths
Cap-Vert	14	-	2	-	1	-	-	-	-	-
Casamance	4	-	-	-	5	-	2	-	-	-
Diourbel	1	-	-	-	5	-	-	-	-	-
Fleuve	2	-	-	-	4	-	-	-	-	-
Eastern Senegal	61	3	1	-	6	1	-	-	-	-
Sine-Saloum	113	-	228	3	65	-	-	-	-	-
Thies	6	-	-	-	5	1	-	-	-	-
TOTAL	201	3	231	3	91	2	2	-	-	-

Smallpox vaccination activities had already been carried out in Senegal. For the last outbreaks recorded, the surveillance and vaccination measures in the regions concerned were intensified (isolation of patients, surveillance and vaccination of contacts, vaccination of the population around the area where the patients were located).

SMALLPOX VACCINATIONS

1961	1962	1963	1964	1965	1966
1 078 212	510 878	260 371	134 151	166 765	135 568

PART 2. SURVEILLANCE AND VACCINATION PROGRAMME, 1972-1975

2.1 Surveillance programme

2.1.1 Number and type of notifying units, by region

Region \ Units	Permanent health units					Major Endemic Diseases service	
	Hospitals	Health centres	Health posts	MCH centres	Public health services	Sectors	Subsectors
Cap-Vert	4	1	55	24	1	1	-
Casamance	1	6	87	7	1	2	-
Diourbel	1	6	44	6	1	1	2
Fleuve	1	4	61	6	1	1	-
Eastern Senegal	0	3	28	3	1	1	2
Sine-Saloum	1	8	74	10	1	1	-
Thies	1	5	49	10	1	1	-
TOTAL	9	33	398	66	7	7	4

2.1.2 During the eleventh, twelfth, thirteenth and fourteenth weeks of the years 1974 and 1975, the notifying units reported no suspected or confirmed cases of smallpox.

2.1.3 No suspected cases of smallpox were notified between 1972 and 1975 (first quarter).

2.1.4 During the period 1972 to 1975 (first quarter) no deaths attributable to chickenpox were notified.

DEATHS ATTRIBUTABLE TO CHICKENPOX, BY YEAR

Year	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975
Number of deaths	1	7	3	0	0	0	0	0	0	0	0

2.2 Vaccination programme (from 1972 to the present time)

2.2.1 The mass smallpox vaccination campaign was continued until 1971. As from 1972 the vaccination campaign entered the maintenance phase. During this phase, alongside vaccinations performed by the mobile teams of the sectors of the Major Endemic Diseases Service, vaccination was gradually introduced into the routine activities of some non-mobile health units (health centres and MCH centres).

The smallpox vaccine was supplied by USAID, Atlanta, and by the Government (purchased from the Institut Pasteur).

Vaccination technique: PED-0-JET and bifurcated needle.

ANNUAL NUMBER OF SMALLPOX VACCINATIONS

Year	1972	1973	1974	1975 (first quarter)
Number of vaccinations	182 339	97 353	516 149	Data not yet available

It should be noted that the reduction in the number of smallpox vaccinations during 1972 and 1973 was due to the fact that the Major Endemic Diseases services concentrated their activities during that period on cholera vaccinations, since an epidemic outbreak of cholera was recorded in Senegal.

During 1974 and the first quarter of 1975 an evaluation of smallpox vaccination coverage was carried out in the regions of Diourbel, Fleuve, Casamance and Eastern Senegal by checking for vaccination scars.

Sampling points were fixed, selecting at random a number of villages in which clusters were determined on the basis of lists of families.

PRELIMINARY RESULTS FOR THE PRESENCE OF SMALLPOX VACCINATION  
SCARS, BY REGION AND BY AGE-GROUP

Vaccination coverage			Number of subjects examined	Coverage by age-group (%)				
Region	Department	Number of villages investigated		All ages	0-4 years	5-14 years	15-59 years	60 and over
Diourbel	Linguere	7	703	38.8	5.3	27.5	57.0	43.8
Fleuve	Matam	20	2 028	31.4	4.4	35.4	44.4	11.0
Casamance	Kolda	6	611	62.7	18.3	71.7	76.5	36.0
Eastern Senegal	Kedougou	9	893	37.0	6.1	25.8	52.9	14.8