



NIGERIA

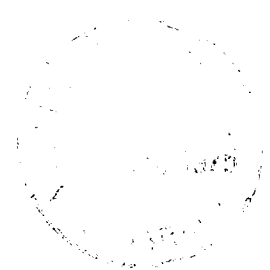
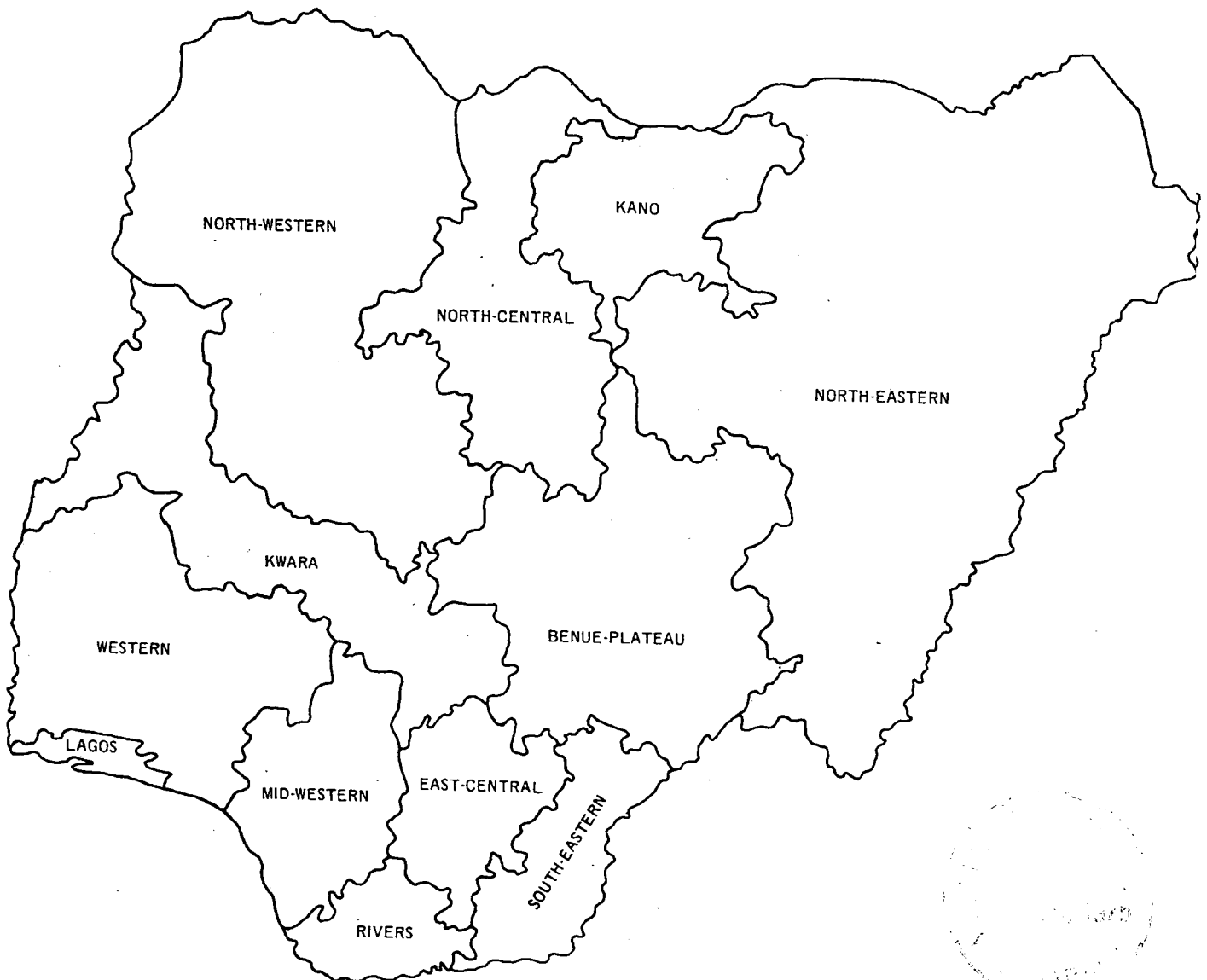
Area: 929 000 km²

Population: 72 702 000

Density of population: 78/km²

Medical Officer currently
in charge of smallpox eradication: Dr E. Ademola Smith

Title: Senior Consultant Epidemiologist



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1.2 Vaccination programme

1.2.1 The Smallpox Eradication/Measles Programme was launched in 1966 and started in 1967 by the Federal Republic of Nigeria in collaboration with USAID and WHO as part of the West and Central Africa programme of the global Eradication of Smallpox. The attack phase consisted of:

- (1) active and passive surveillance of all smallpox and severe chickenpox cases;
- (2) vaccination of a target of at least 80% of the total population.

For this purpose, epidemiological units were established at federal and state levels. The attack phase was followed by a maintenance phase during which all persons missed in the attack phase would be vaccinated as well as immigrants and newborn babies. A strict surveillance was also carried out on all suspected cases of smallpox and severe cases of chickenpox. At the moment the country is in the maintenance phase. Both concurrent and terminal assessment were carried out in the programme.

Producers of vaccine used for the programme:

- (1) Wyeth International (United States of America)
- (2) Federal Laboratory Service, Yaba, Lagos (Nigeria)

A total of 68 741 883 smallpox vaccinations were performed during the period 1967-1971 (Table 2).

Vaccination assessment was an integral part of the programme. The principal method used was to survey the vaccinated areas to determine coverage and take rates (concurrent assessment). Spot-check assessments were extremely useful to verify the teams performance rather quickly.

Terminal assessments were carried out at the end of a systematic vaccination campaign to provide an independent evaluation of the programme.

SMALLPOX VACCINATION COVERAGE AND TAKE RATES, NIGERIA
1967-1971

States	Vaccination coverage			Take rates %
	Examined	Scar +	%	
North Western	125 100	118 970	95.1	94.0
Lagos	29 284	25 104	85.7	96.0
Western	15 607	14 106	90.4	100.0
Kano	9 847	8 771	89.1	96.0
Rivers	1 023	571	55.8	
Midwest	29 910	20 324	68.0	97.7
TOTAL	210 771	187 846	89.1	96.7

1.3 Surveillance - containment programme

1.3.1 Number of units providing monthly reports by state to the Federal Epidemiological Unit, Lagos.

States	1967	1968	1969	1970	1971
Lagos		2	6	9	18
Western		20	18	21	17
Mid-Western		12	14	18	12
Rivers State		NA	7	7	5
South-Eastern		NA	8	4	5
East-Central		NA	NA	15	35
Benue/Plateau		8	8	8	8
Kano		3	3	4	10
Kwara		6	6	9	13
North-Central		4	5	11	10
North-Eastern		10	10	11	19
North-Western		6	7	10	11
TOTAL		71	92	127	163

1.3.2 Weekly reports of 22 infectious diseases, including smallpox, are made. Monthly returns are made of smallpox and measles cases and deaths, and number of vaccinations performed (sample forms Annex 1.a, b, c, d).

Returns are passed from reporting units to districts by hand; from district to state headquarters by hand/letters/telephone/telegramme; and from state to national level by telephone/telegramme/radiophone followed by confirmatory letters.

1.3.3 No cases of smallpox have been detected in Nigeria since June 1970 (Tables 3, 4, 5, 6).

1.3.4 The location of the last outbreaks (1969-1970) are shown on the map.

1.3.5 The last two outbreaks occurred in 1970, one in Amayo comprising 61 cases during the period October 1969 to 4 April 1970 (line listing, Annex 2), and the last in Shagamu, comprising two cases:

Address	Name	Age	Sex	Father's name	Vaccination status	Date of onset of rash	Outcome	Source of infection
Araromi Village Shagamu WS	Suraju Sopitan	45 yrs	Male		Not vaccinated	6.5.70	Recovered	? from husband who died
2 doors away from Case I	Modinatu Amusa	27 yrs	Female	?	Not vaccinated	21.5.70	Recovered	Case I

The report of the Assessment Supervisor of this outbreak is attached (Annex 3).

PART 2 - SURVEILLANCE AND VACCINATION PROGRAMME 1972-1975

2.1 Surveillance programme

2.1.1 Number of units reporting monthly to the Federal Epidemiological Unit, Lagos.

States	1972	1973	1974	1975
Lagos	17	15	14	Not available yet
Western	17	17	17	
Mid-Western	12	12	12	
Rivers	5	5	5	
South-Eastern	14	14	14	
East-Central	35	35	35	
Benue/Plateau	9	9	9	
Kano	10	10	8	
Kwara	13	13	11	
North-Central	10	10	10	
North-Eastern	19	19	22	
North-Western	13	13	13	
TOTAL	174	172	170	

2.1.2 Number of states reporting in 1974 and 1975 in Nigeria.

Week No.	1974											
	Kwara	Kano	B. Plateau	N-West	N-East	N-Central	Rivers	E-Central	S-East	West	Midwest	Lagos
11	+	+	+	+	+	+	+	+	+	+	+	+
12	+	+	+	+	+	+	+	+	+	+	+	+
13	+	+	+	+	+	+	+	+	+	+	+	+
14	+	+	+	+	+	+	+	+	+	+	+	+
Week No.	1975											
	11	+	+	+		+		+	+	+	+	
	12	+	+	+		+	+	+	+	+	+	
	13	+	+	+		+		+	+	+	+	
	14	+				+					+	

⁺ Weekly epidemiological report received - as on 3 May 1975 at federal level including nil report for Smallpox.

2.1.3 Between 1972 and the end of 1974 a total of 23 suspected smallpox cases have been detected, all of which were negative for smallpox (Table 7).

2.1.4 Between May 1973 and April 1975, five deaths from chickenpox have been investigated (Table 8).

2.1.5 Areas with suspected smallpox cases (1972-1975) are shown on the map.

2.2 Vaccination programme (1972 to present)

2.2.1 Number of vaccinations reported in Nigeria 1972-1974 by age-group.

Year	Under 1 year	1-4 years	4-14 years	15+	Unknown	Total
1972	268 838	591 171	1 090 207	1 844 561	2 214 245	6 009 022
1973	307 893	599 789	1 037 164	1 306 200	1 628 287	4 879 333
1974	419 395	1 060 241	1 300 952	1 776 969	1 114 149	5 671 706
TOTAL	996 126	2 251 201	3 428 323	4 927 730	4 956 681	16 560 061

Assessment - concurrent assessment is always built-in but data are not available.

2.2.2 Surveillance and maintenance vaccination programmes have continued in all parts of Nigeria from 1972 to date. All suspected cases are investigated at all levels in the country with full collaboration of WHO personnel and national health staff at the federal level.

TABLE 1. STATIC HEALTH UNITS AND MOBILE TEAMS BY STATE, NIGERIA
1971

States	Hospitals										M.C.H. Centres	Health Centres, Dispensaries, Clinics etc.	Leprosy Clinics	Grand Total	Mobile Teams
	General	Infectious Dis.	Specialist	Teaching	Others	Total	Maternities								
Kwara	17	4	-	-	-	21	12	55	116	188	392	5			
Kano	11	1	3	-	-	15	-	8	121	236	380	10			
Benue /Plateau	17	-	-	-	-	17	1	-	189	-	207	10			
North-West	10	2	-	-	-	12	12	6	232	438	700	12			
North-East	18	-	-	-	-	18	4	-	3	3	28	12			
North-Central	10	1	-	1	1	13	1	3	114	2	133	12			
Rivers	12	1	2	1	1	17	110	-	27	7	161	5			
East-Central	72	3	4	1	2	82	509	-	269	5	865	10			
South-East	39	1	3	-	1	44	65	9	134	86	338	5			
Western	50	33	3	1	2	89	337	24	604	2	1 056	12			
Mid-Western	21	3	-	1	-	25	144	-	165	2	336	4			
Lagos	45	1	4	1	2	53	43	7	106	1	210	6			
TOTAL FOR COUNTRY	322	50	19	6	9	406	1 238	112	2 080	970	4 806	103			

TABLE 2. FEDERAL REPUBLIC OF NIGERIA
SMALLPOX-VACCINATION RETURNS
BY STATE AND YEAR, 1967-1971

States	Years					Total
	1967	1968	1969	1970	1971	
Lagos	1 206 219	50 392	474 199	375 271	240 399	2 346 480
West	4 607 037	9 977 256	2 805 895	1 780 656	739 965	19 910 809
Midwest	1 109 355	1 157 279	741 442	367 842	258 690	3 634 608
East-Central	675 000	-	19 322	717 007	848 060	2 259 389
South-East	75 000	135 048	384 790	353 180	368 523	1 316 541
Rivers	353 213	-	213 739	128 140	261 630	956 722
Kwara	353 243	-	1 926 052	835 098	741 004	3 855 397
Benue/Plateau	304 785	17 529	1 724 177	1 975 857	526 759	4 549 107
Kano	159 104	2 901 035	1 615 046	654 077	548 558	5 877 820
North-Central	673 239	2 707 179	2 062 844	177 612	401 893	6 022 767
North-Eastern	870 490	1 613 622	3 582 894	396 662	373 014	6 836 682
North-Western	4 490 745	233 717	1 293 798	207 478	326 649	6 552 387
Federation	14 877 430	18 793 057*	16 844 198	7 968 880	5 635 144	68 741 883*

* In 1968 there are a total of 4 623 174 vaccinations performed but not classified by geographical distribution. This figure therefore brings the total vaccinations performed in 1968 to 23 416 231 in the Federation.

TABLE 3. FEDERAL REPUBLIC OF NIGERIA
NOTIFICATION OF CASES AND DEATHS FROM SMALLPOX
BY MONTHS AND STATES 1967

Months	North		East		West		Midwest		Lagos		Nigeria Total	
	C	D	C	D	C	D	C	D	C	D	C	D
January	287	18	65	18	12	-	6	-	-	-	370	36
February	637	90	82	2	109	12	13	2	1	-	842	106
March	777	45	107	4	51	10	3	1	2	-	940	60
April	872	50	57	4	42	8	21	2	-	-	992	64
May	722	58	8	-	10	1	13	-	3	-	756	59
June	237	12	-	-	16	1	9	2	1	1	263	16
July	143	5	-	-	7	-	4	-	2	-	156	5
August	101	19	-	-	7	-	-	-	2	-	110	19
September	43	2	-	-	5	1	-	-	-	-	48	3
October	66	4	-	-	5	-	-	-	4	-	75	4
November	95	7	-	-	11	2	-	-	-	-	106	9
December	87	13	-	-	8	1	-	-	-	-	95	14
TOTAL	4 067	323	319	28	283	36	69	7	15	1	4 753	395

KEY NOTES

C = Cases
D = Deaths.

TABLE 4. FEDERAL REPUBLIC OF NIGERIA
NOTIFICATION OF CASES AND DEATHS FROM SMALLPOX
BY MONTHS AND STATES 1968

Months	KWS		KS		BPS		NWS		NCS		RS		ECS		SES		WS		MW		LS		Fed. Republic Total	
	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D
January)	9	2	453	42	63	8	26	1	360	24	70	1	-	-	-	-	14	1	1	-	1	-	997	79
February)	-	-	148	30	4	-	-	52	-	17	2	-	-	-	-	-	4	1	-	-	4	-	229	33
March)	1	-	179	11	30	2	3	-	97	12	10	1	-	-	-	-	1	-	-	-	10	1	331	27
April)	-	-	60	7	3	-	1	-	38	2	9	-	-	-	-	-	5	1	-	-	2	2	118	12
May)	-	-	10	3	9	-	4	-	4	1	5	-	-	-	-	-	3	-	-	-	2	-	37	4
June)	-	-	1	-	5	-	-	13	3	5	-	-	-	-	-	-	5	-	-	-	2	-	31	3
July)	12	3	-	-	-	-	2	-	2	-	1	-	-	-	-	-	5	1	-	-	2	-	24	3
August)	5	-	-	-	3	-	-	1	1	-	37	-	-	-	-	-	3	1	-	-	-	-	49	1
September)	1	-	1	-	-	-	-	-	-	-	3	-	-	-	-	-	2	1	-	-	2	-	9	1
October)	-	-	1	-	3	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	6	-
November)	28	5	853	93	120	10	37	1	567	42	157	4	-	-	-	-	42	6	1	-	26	3	1 831	163
December)																								
TOTAL																								

KEY NOTES
C = Cases
D = Deaths.

TABLE 5. FEDERAL REPUBLIC OF NIGERIA
NOTIFICATION OF CASES AND DEATHS FROM SMALLPOX
BY MONTHS AND STATES 1969

Months	KWS		KS		BPS		NWS		NBS		NCS		RS		ECS		SES		WS		MW		IS		Fed. Republic Total		
	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	
January	-	-	17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	18	-
February	10	4	11	-	5	-	3	-	-	-	-	-	-	-	-	-	-	-	-	5	-	-	-	-	34	4	
March	49	10	16	-	2	1	1	1	2	-	-	-	-	-	-	-	-	-	-	2	2	-	-	-	72	13	
April	4	1	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6	1	
May	3	-	-	-	1	-	8	1	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	13	1	
June	1	-	1	-	-	-	-	-	-	-	22	-	-	-	-	-	-	-	-	1	-	-	-	-	25	-	
July	-	-	-	-	-	-	-	-	-	-	2	-	-	-	-	-	-	-	-	1	-	-	-	-	3	-	
August	-	-	-	-	-	-	-	-	5	-	1	-	-	-	-	-	-	-	-	2	-	-	-	-	8	-	
September	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
October	-	-	-	-	-	-	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-	
November	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	1	-	-	-	2	1	
December	2	-	-	-	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	-	
TOTAL	69	15	46	-	9	2	14	2	9	-	25	-	-	-	-	-	-	-	-	14	3	1	-	-	187	20	

KEY NOTES
C = Cases
D = Deaths.

TABLE 6. FEDERAL REPUBLIC OF NIGERIA
NOTIFICATION OF CASES AND DEATHS FROM SMALLPOX
BY MONTHS AND STATES 1970

Month	KWS		KS		BPS		NWS		NES		NCS		RS		CES		SES		WS		MW		LS		Fed. Republic Total		
	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	
January	11																									11	
February	33																									33	
March	16				3																					23	
April	2																									4	
May	2																									7	
June	-																									1	1
July	-																									-	
August	-																									-	
September	-																									-	
October	-																									-	
November	-																									-	
December	-																									-	
TOTAL	64				3		3					3									6	1			3	79	1

KEY NOTES
C = Cases
D = Deaths.

TABLE 7. REPORTED SMALLPOX SUSPECTS 1972-1975

Name	Age	Sex	Locality	Vacc. status	Date of			Clinical diagnosis	Laboratory diagnosis	Outcome	Action taken
					Onset of rash	Notification	Investigation				
Victory Esiere	14 years	M	T/Nada Ousau NWS	Succ Vacc.	9/1/1972	29/1/1972	30/1/1972	Chickenpox	N.A.	Recovered	Vaccination of the entire compound
Christina Esiere	35 years	F	T/Nada Ousau NWS	Succ Vacc.	25/1/1972	29/1/1972	30/1/1972	Chickenpox	N.A.	Recovered	Vaccination of the entire compound
Solomon Ebinyasi	30 years	M	Owerri, ECS	N.A.	18/1/1972	23/1/1972	23/1/1972	Chickenpox	N.A.	Recovered	Vaccination of the entire compound
Etila Itodo	25 years	F	Agaliga, KWS	N.A.	N.A.	N.A.	14/2/1973	Chickenpox	Performed but negative for smallpox	N.A.	Collection of specimen
Silvester Sailu	2 years	M	Agaliga, KWS	N.V.	N.A.	N.A.	14/2/1973	Chickenpox	N.A.	N.A.	Assessment of immunity status
Ajara Adejo	23 years	F	Agaliga, KWS	N.A.	N.A.	N.A.	14/2/1973	Chickenpox	N.A.	Recovered	Health education vaccine supplied
Inusa Musa	N.A.	M	Kano State	N.A.	N.A.	N.A.	16/4/1973	Chickenpox	Performed - negative for smallpox	N.A.	Not available
Binta Labaran	N.A.	F	Kano State	N.A.	N.A.	N.A.	16/4/1973	Chickenpox	Performed - negative for smallpox	N.A.	Not available
Job Dada	N.A.	M	Ilorin, KWS	N.A.	N.A.	N.A.	2/5/1973	Chickenpox	Performed - negative for smallpox	N.A.	Not available
Saidu Adauji	N.A.	M	Mirna, NWS	N.A.	N.A.	N.A.	19/6/1973	Chickenpox	Performed - negative for smallpox	N.A.	Not available
Bello Maihankali	N.A.	M	NES	N.A.	N.A.	N.A.	27/6/1973	Chickenpox	Performed - negative for smallpox	N.A.	Not available
Isaac Anachuna	29 years	M	Nnewi, ECS	N.A.	12/7/1973	23/7/1973	24/7/1973	Chickenpox	Performed - negative for smallpox	Recovered	Entire compound vaccinated
Ferdinand Ike	22 years	M	Orlu, ECS	N.A.	18/7/1973	30/7/1973	30/7/1973	Chickenpox	Performed - negative for smallpox	Recovered	Entire compound vaccinated
Andrew Eholor	54 years	M	Idumotutu NWS	N.A.	9/8/1973	11/8/1973	13/8/1973	Chickenpox	Performed - negative for smallpox	Recovered	Entire compound vaccinated

TABLE 7. REPORTED SMALLPOX SUSPECTS 1972-1975 (continued)

Name	Age	Sex	Locality	Vacc. status	Date of			Clinical diagnosis	Laboratory diagnosis	Outcome	Action taken
					Onset of rash	Notification	Investigation				
Stephen Luka	6 years	M	Kaduna	N.A.	8/9/1973	11/9/1973	11/9/1973	Chickenpox	Performed - negative for smallpox	N.A.	Entire compound vaccinated
Meri Luka	27 years	F	Kaduna	N.A.	8/9/1973	11/9/1973	11/9/1973	Chickenpox	Performed - negative for smallpox	N.A.	Entire compound vaccinated
Ali Mare	40 years	M	Ajire, NES	N.A.	12/4/1974	15/4/1974	15/4/1974	Chickenpox	Performed - negative for smallpox	Died	Vaccination of the entire population
Hajara Simon	14 years	F	Kaduna	N.A.	26/4/1974	N.A.	18/5/1974	Chickenpox	Performed - negative for smallpox	N.A.	Entire compound vaccinated
Simeon Aighekhuomwi	50 years	M	S/Lere, LS	N.A.	16/8/1974	21/8/1974	21/8/1974	Chickenpox	Performed - negative for smallpox	Died	Immediate Burial
Bernard Ekaka	N.A.	M	Shomolu, LS	N.A.	N.A.	9/10/1974	10/10/1974	Chickenpox	Performed - negative for smallpox	Recovered	Not available
Tewn Ekaka	N.A.	F	Shomolu, LS	N.A.	N.A.	9/10/1974	10/10/1974	Chickenpox	Performed - negative for smallpox	Recovered	Not available
Edwin Ekaka	N.A.	M	Shomolu, LS	N.A.	N.A.	9/10/1974	10/10/1974	Chickenpox	Performed - negative for smallpox	Recovered	Not available
Atare Ekaka	N.A.	F	Shomolu, LS	N.A.	N.A.	9/10/1974	10/10/1974	Chickenpox	Performed - negative for smallpox	Recovered	Not available
Efe Ekaka	N.A.	F	Shomolu, LS	N.A.	N.A.	9/10/1974	10/10/1974	Chickenpox	Performed - negative for smallpox	Recovered	Not available
Bassey	N.A.	M	V/Island	N.A.	N.A.	N.A.	N.A.	Chickenpox	Performed - negative for smallpox	Recovered	Not available

N.A. = Not available.
N.V. = Not vaccinated.

TABLE 8. LINE LISTING OF DEATHS DUE TO CHICKENPOX IN NIGERIA (1972-1975)

Name	Age in years	Sex	Locality	Vacc. status	Date of			Clinical diagnosis	Laboratory diagnosis	Action taken
					Onset of rash	Notification	Investigation			
Adeola Ganiyu	2	M	N.5/281 Gbelua Ibadan	?	19/4/1973	19/4/1974	-	Chickenpox	-	
Abu Usman	Adult	M	Federal Prison Ibadan	Yes	3/5/1973	4/5/1973	-	Chickenpox	-	
Ali Mare	40	M	Ajire NES	Yes	12/4/1974	15/4/1974	15/4/1974	Chickenpox	Vaccination of entire village	
Simeon Aighekuomwi	50	M	S/Lere Lagos	?	16/8/1974	21/8/1974	21/8/1974	Chickenpox	Vaccination of contacts	
Natiasatu Animasahun	20 days	F	Gege Ateuda, Ibadan	-	26/4/1975	26/4/1975	27/4/1975	Chickenpox	Vaccination of contacts	

IV. AGE AND SEX DISTRIBUTION OF REPORTED CASES AND DEATHS

A. Smallpox cases for period _____ to _____

AGE GROUP	MALE		FEMALE		UNKNOWN		TOTAL	
	CASES	DEATHS	CASES	DEATHS	CASES	DEATHS	CASES	DEATHS
<1								
1 - 4								
5 - 14								
15 - 44								
45+								
UNKNOWN								
TOTAL								

B. Measles cases for period _____ to _____

AGE GROUP	SEX			TOTAL
	MALE	FEMALE	UNKNOWN	
< 1				
1 - 4				
5 - 14				
15 +				
UNKNOWN				
TOTAL				

(OPTIONAL)

AGE GROUP	SEX			TOTAL
	MALE	FEMALE	UNKNOWN	
<1				
1				
2				
3				
4				
5 - 9				
10 - 14				
15 +				
UNKNOWN				
TOTAL				

VI. VACCINATION PERFORMED BY AGE AND SEX

A. Smallpox vaccinations performed by project teams

TYPE	SEX	AGE						UNKNOWN	TOTAL
		UNDER 6 MOS.	6 - 11 MOS.	YEARS					
				1 - 4	5 - 14	15 - 44	45+		
JET INJECTOR	MALE								
	FEMALE								
	UNKNOWN								
	TOTAL								
MULTIPLE PRESSURE	MALE								
	FEMALE								
	UNKNOWN								
	TOTAL								
TOTAL	MALE								
	FEMALE								
	UNKNOWN								
	TOTAL								

B. Smallpox vaccinations performed by non-project personnel

SEX	AGE						UNKNOWN	TOTAL
	UNDER 6 MOS.	6 - 11 MOS.	YEARS					
			1 - 4	5 - 14	15 - 44	45+		
MALE								
FEMALE								
UNKNOWN								
TOTAL								

C. Measles vaccinations

SEX	AGE				UNKNOWN	TOTAL
	UNDER 6 MONTHS	6 MOS. TO 6 YEARS	ABOVE 6 YEARS			
MALE						
FEMALE						
UNKNOWN						
TOTAL						

D. Vaccination Reactions and Side Effects

*Modify age groups to fit local tally data, if necessary.

1970 AMAYO OUTBREAK - LINE LISTING OF PATIENTS

Case No.	Locality	Compound Code	Age	Sex	Vacc. Scar	Rash onset	Out-come	Source of infection
1	Amayo	J3	8	M	No	30/10	R	?
2	Amayo	J1	10	M	No	13/11	R	1 (J3)
3	Amayo	J2	12	F	No	13/11	R	1 (J3)
4	Amayo	K1	13	M	No	13/11	R	1 (J3)
5	Amayo	A1	6	M	No	4/12	R	2 (J2)
6	Amayo	A1	2	F	No	24/12	R	?
7	Amayo	FF1	8	M	No	1/1	R	?
8	Amayo	U1	10	F	No	1/1	R	?
9	Amayo	Z1	8	M	No	27/1	R	?
10	Amayo	L1	3	M	No	1/2	R	?
11	Amayo	Y3	5	M	No	5/2	R	?
12	Amayo	Q1	5	F	No	6/2	R	?
13	Amayo	S1	8	M	No	8/2	R	?
14	Amayo	B2	25	M	No	10/3	R	25 (B1)
15	Gbagede	DD1	8	F	No	13/2	R	?
16	Amayo	O1	7	M	No	14/2	R	?
17	Amayo	W1	7	F	No	15/2	R	23 (N1)
18	Amayo	EE1	17	M	No	16/2	R	?
19	Amayo	W2	9	M	No	17/2	R	?
20	Amayo	R1	9	M	No	17/2	R	12 (Q1)
21	Amayo	M1	2	F	No	17/2	R	?
22	Amayo	AA1	18	M	No	17/2	R	?
23	Amayo	N1	9	M	No	20/2	R	?
24	Amayo	E1	5	M	No	20/2	R	?
25	Amayo	B1	20	M	No	20/2	R	?
26	Amayo	C1	8	F	No	23/2	R	?
27	Amayo	M2	5	F	No	23/2	R	?
28	Amayo	M3	3-1/2	M	No	23/2	R	?
29	Amayo	V1	7	M	No	24/2	R	?
30	Amayo	F1	40	M	No	25/2	R	?
31	Amayo	X1	8 m.	M	No	26/2	R	?
32	Amayo	D1	7	F	No	26/2	R	?
33	Gana	BB1	14	M	No	28/2	R	(Amayo)
34	Amayo	I5	8	F	No	28/2	R	?
35	Amayo	Y2	1	F	No	28/2	R	11 (Y3)
36	Amayo	II	2	F	No	23/3	R	?
37	Amayo	I2	23	M	No	3/3	R	?
38	Amayo	I3	2	M	No	3/3	R	?
39	Amayo	I4	3	F	No	3/3	R	?
40	Gbagede	CC2	9	M	No	5/3	R	15 (DD1)
41	Amayo	GC1	9	F	No	6/3	R	?
42	Amayo	N2	8	F	No	7/3	R	23 (N1)
43	Amayo	N3	10	M	No	7/3	R	23 (N1)
44	Amayo	AA2	11	F	No	9/3	R	22 (AA1)
45	Amayo	AA3	6	M	No	9/3	R	?
46	Amayo	G1	14	F	No	10/3	R	25 (B1)
47	Amayo	H1	14	F	No	10/3	R	25 (B1)
48	Amayo	P1	6 m.	M	No	10/3	R	?
49	Amayo	T1	6	F	No	10/3	R	?
50	Amayo	M4	11	M	No	12/3	R	27 (M2)
								28 (M3)
51	Amayo	F2	4	M	No	14/3	R	30 (F1)
52	Amayo	F3	7	M	No	14/3	R	30 (F1)
53	Amayo	AA4	12	F	No	15/3	R	22 (AA1)
54	Amayo	B3	14	F	No	17/3	R	25 (B1)
55	Amayo	C2	3	M	No	19/3	R	?
56	Amayo	M5	23	F	No	19/3	R	27 (M2)
57	Amayo	I6	10 m.	M	No	20/3	R	?
58	Gbagede	CC1	6	M	No	22/3	R	?
59	Amayo	D2	14	M	No	24/3	R	32 (D1)
60	Amayo	Y1	13	M	No	25/3	R	35 (Y2)
61	Gbagede	DD2	1-1/2	M	No	7/4	R	58 (CC1)

R = Recovered.

1970 SHAGAMU SMALLPOX OUTBREAK

Case I Suraju Sopitan: Male
 Aged: 45 years
 Occupation: Farmer

This patient took ill at Araromi a village five miles from Shagamu. He was removed to house No. BI/7 Itu Ishokun, Shagamu. Onset of rash was on 6 May 1970. Date of examination: 18 May 1970.

Case II Modinatu Amusa: Female
 Aged: 27 years
 Occupation: Petty-trader

This patient took ill in Shagamu, two doors away from the first case, developed a rash and was moved to Ode Lemo, a small town eight miles from Shagamu on the same road as Araromi. She was removed by the health authorities to I.D.H. Shagamu. Onset of rash 21 May 1970. Date of examination: 25 May 1970

Both Cases I and II have been confirmed as smallpox cases by the laboratory in Lagos.

Measures taken

- (1) The immediate contacts in both compounds were all vaccinated. A house to house search of all houses in the area was conducted on four consecutive occasions to look for any new or suspected cases. None were found.
- (2) An assessment of immunity level of the compounds surrounding the smallpox house in Shagamu was conducted. Immunity level was 77.8%. All people in these houses were vaccinated. These houses have been visited on four consecutive occasions, looking for any likely cases but none were found.
- (3) Ode Lemo: The house where the second case was found at Adugbo Balogun, Ode Lemo has been visited four times. All immediate contacts have been vaccinated and all surrounding houses were searched and no new cases found. An immunity level assessment was done. Immunity level was 81%.
- (4) All villages on the route between Shagamu and Ode Lemo have been visited. All houses in these villages were searched. Vaccinations of people at risk were done. These villages are as listed hereunder:

Ijokun-Odelemono, Araromi, Ajeregub, Ode Lemo, Ibelefun, Ajegunle, and Igodo.

- (5) The Health Office Shagamu has disinfected the houses where the two patients were found.

Investigation

Investigations have revealed that the husband of the second case Modinatu Amusa died from smallpox in their house in Shagamu about two months ago. His name was Amusa Ataniyan, male: aged about 48 years. He lived at Ishokun Shagamu with the second case. His corpse was removed and buried by Shopono Juju priests. All efforts to trace his place of burial have been thwarted. It is very probable however that he died from smallpox as the inmates of his house and the surrounding houses voluntarily sought for vaccination from the Shagamu health authorities at the time. Also a retired health labourer confirmed that he died of smallpox. This case had a farm at Ajebandele a few miles from Ode Lemo. He developed the rash there and was moved to his house in Shagamu.

Three visits were made to Ajebandele. The little village of about six houses was deserted, and it has not been possible to make contact with anybody there.