



INTER-REGIONAL SEMINAR ON SMALLPOX ERADICATION

Lagos, Nigeria, 13-20 May 1969

COUNTRY REPORT



INDEXED

1.0 DEMOGRAPHIC DATA

1.1 Estimated population (July 1969)

Age	
0-4	5 604 000
5-14	7 482 000
15-44	12 519 000
45+	4 173 000
TOTAL	29 778 000

1.2 Population by geographic subdivision (Table 1)

1.3 Population density by geographic subdivision (Table 1)

1.4 Population density by geographic subdivision (Figure 1)

2.0 SMALLPOX INCIDENCE AND VACCINATION DATA

2.1 Smallpox cases by month and geographic subdivision - Jan. 1968 - Feb. 1969 (Table 1)

2.2 Location of smallpox outbreaks.

Oct. 68 - Dec. 68 (Figure 2)

Jan. 69 - Feb. 69 (Figure 3)

2.3 Incidence rates per 100 000 population by geographic subdivision and by quarter.

Jan. 68 - Mar. 68 (Figure 4)

Apr. 68 - Jun. 68 (Figure 5)

Jul. 68 - Sep. 68 (Figure 6)

Oct. 68 - Dec. 68 (Figure 7)

Jan. 69 - Feb. 69 (Figure 8)

2.4 Monthly distribution of smallpox cases by age and sex - Jan. 1969 - Feb. 1969
(Table 3)

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- 2.5 Smallpox vaccinations performed by quarter and geographic subdivision - January 1968 through February 1969 (Table 4)
- 2.6 Areas vaccinated since inception of the programme (Figure 9)
- 2.7 Smallpox vaccination targets by geographic subdivision - July 1969 through June 1970 (Table 5)
- 2.8 Method for recording of vaccinations:

Tally sheet: Yes No

Other registry system (specify) _____

- 2.9 Youngest age for beginning smallpox vaccination:

Birth 6 months Other _____

- 3.0 MEASLES INCIDENCE AND VACCINATION DATA (for countries engaged in measles vaccination programmes)

- 3.1 Reported measles cases by month and geographic subdivision (Table 6)
- 3.2 Measles immunizations by quarter and geographic subdivision (Table 7)
- 3.3 Areas vaccinated against measles since inception of the programme and areas where maintenance vaccination programmes have been initiated (Figure 10)

4.0 NUMBER OF PERSONNEL ENGAGED IN VACCINATION PROGRAMME

4.1 Vaccinators: Regular teams	<u>160</u>
Maintenance teams	<u>10</u>
Other (Specify)	<u>-</u>
TOTAL	<u>170</u>

Other field staff, including recorders, drivers, etc. 52

Supervisory personnel (paramedical) 47

- 4.2 Number of vaccinators directly supervised by one supervisor 5

- 4.3 Average number of vaccinations performed daily by each team:

Regular teams 2 869

Maintenance teams 1 440

Other (specify) _____

5.0 PROGRAMME EXECUTION

5.1 Supervision

5.1.1 Proportion of time spent in field by supervisory staff and technical advisory staff checking directly on the work of vaccinators and assessors and lower level supervisors:

By country staff reviewing work of - Vaccination team: 21 days per mo.

Other levels: 7 days per mo.

By advisory staff reviewing work of -

Vaccination team: 14 days per mo.

Other levels: 10 days per mo.

5.1.2 Measures taken when vaccinator or assessor performance is unsatisfactory
Measures taken vary, depending on the reasons for unsatisfactory performance, from reprimand to dismissal

5.2 Assessment

5.2.1 Vaccine "take rates"

Proportion of primary vaccinations in 0-4 year old children which are checked after seven days to determine takes Spot checks, less than 0.1%

Steps taken when the proportion of successful primary vaccination falls below 95% None found

5.2.2 Vaccination coverage:

Number of vaccinations performed in each area are compared with the population estimate for the area (e.g. village register, census, etc.)

Yes

No

5.2.3 Assessment of coverage:

An assessment of coverage is regularly performed in a sample of the population

Yes

No

Level of coverage in the 0-4 and 5-14 year age group which is considered acceptable

85%

80%

Other _____

Proportion of assessment surveys which fall below the level noted above.

16.3 %

Steps taken if the coverage is not acceptable (i.e. revaccinate the area etc.)
1) Identification and revaccination of inadequately covered areas;
2) Special effort to revaccinate such areas during the maintenance programme.

Changes which have been made in the programme as a direct result of assessment Greater emphasis on reaching younger age groups

5.3 Surveillance

5.3.1 Notification of smallpox cases:

Number of sites which could report smallpox cases (e.g. hospitals, health centres, health posts, dispensaries) 37 major medical reporting areas, having approximately 186 central dispensaries and hospitals

Frequency of reporting:

Immediate (30% by telegram) Other _____

Number of reports: Expected in 1968 1 936

Received in 1968 960

% received 49

Negative reporting is generally practised: Yes No

Other specialized programmes which report cases

Sleeping sickness, leprosy

Other persons or groups who have been requested to notify cases
All village heads are required by Local Authority to report immediately to the District Health Officer, who in turn notifies the Local Authority Chief¹⁾

Proportion of cases for which age, sex, and vaccination status are recorded

0 %

Best estimate of the percentage of cases which are reported:

	January 1967	February 1969
More than 90%	_____	_____
75-89%	_____	<u>X</u>
50-74%	_____	_____
Less than 50%	<u>X</u>	_____

5.3.2 Case investigation and containment measures:

Number of case investigation/containment ('fire-fighting') teams which have been established 3

These teams are: Centralized Decentralized

If decentralized, to what extent _____

Proportion of cases, since October 1968, in which containment action was taken within 48 hours after notification 30 %

Proportion of outbreaks, since October 1968, routinely investigated to determine the origin of infection 96 %

Of the investigations noted above, the percentage of outbreaks where the origin was not ascertained 71 %

¹⁾ Sanitary Inspector who notifies the State Ministry of Health or the appropriate Medical Area, who notify SMP Kaduna. Missionaries (Bornu, Bauchi, Benue, Plateau, Adamawa, Sandauna, Kabba, and Ilorin Provinces) notify SMP Kaduna through State Ministries of Health.

6.0 COMMODITIES

	Col. 1	Col. 2	Col. 3	Col. 4	
6.1 Vaccine use:	Number of Doses Recd.	Number of Doses in Inventory	Number of Doses Used (Col.1-Col.2)	Number of Vacc. performed	Reasons for Difference between Col.3 and Col.4
Year					
				4 152 150	
<u>Smallpox vaccine</u>		1 750 000		12 290 340	
1969*	1 250 000	1 922 700	2 077 300	1 833 163	1)
				686 746	
<u>Measles vaccine</u>		120 800		1 576 173	
1969*	300 000	133 900	286 900	256 554	Normal loss

* January and February only

6.2 Equipment:

<u>Item</u>	<u>Number Supplied</u> *	<u>Number in Operation</u>	<u>Comment</u>
Trucks	53	43	Spare parts supply system ineffective
Ped-o-Jets	171	162	
Refrigerators	54	21	Apparatus too fragile for field use
Motorbikes	22	10	Honda vehicle too complicated

* Since inception of the programme.

Has a warehouse with rotating inventory system for spare parts been established? Yes No

Injector often will not function at .1 cc. Improved maintenance is correcting this.

PAYS NORTHERN STATES OF NIGERIA
COUNTRY

TABLEAU 2. CAS DE VARIOLE PAR MOIS ET PAR DIVISION GEOGRAPHIQUE (JUSQU'A FEVRIER 1969)
TABLE 2. SMALLPOX CASES BY MONTH AND GEOGRAPHIC SUBDIVISION (TO FEBRUARY 1969)

Division géographique	Nombre de cas par mois/Number of cases by month														1969		
	1968														Total	J	F
	J	F	M	A	M	J	J	A	S	O	N	D	Total	J			
Semaines/Weeks	1-5	6-9	10-13	14-17	18-22	23-26	27-31	32-35	36-39	40-44	45-48	49-52		1-5	6-9		
Adamawa Province	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	
Bauchi "	0	18	30	0	1	33	2	27	11	0	1	0	123	0	7		
Benue "	0	0	0	0	1	0	0	0	0	0	0	0	1	14	2		
Bornu "	35	148	117	0	108	43	2	30	45	5	13	3	549	4	0		
Ilorin "	0	0	5	0	0	0	0	0	0	0	4	0	9	1	6		
Kabba "	3	0	1	1	0	1	0	12	6	0	1	0	25	22	71		
Kano State	49	358	46	461	114	26	7	1	0	0	0	2	1 064	17	5		
Katsina Province	9	30	7	2	3	1	1	1	0	0	0	0	54	0	1		
Niger "	0	0	1	0	0	0	0	0	2	0	0	0	3	1	0		
Plateau "	51	11	2	8	8	6	2	4	0	1	0	0	93	0	0		
Sardauna "	10	0	2	1	0	0	0	0	0	0	0	0	13	0	0		
Sokoto "	10	12	4	3	0	1	0	0	0	0	0	0	30	0	0		
Zaria "	2	12	10	16	3	0	0	0	2	35	3	2	85	1	3		
Total	169	589	225	492	238	114	14	75	66	41	22	7	2 052	60	95		

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TABLEAU 3. CAS DE VARIOLE PAR AGE ET PAR SEXE
TABLE 3. SMALLPOX CASES BY AGE AND SEX

Mois	Age								Age/Sexe inconnu	Total	
	0-4		5-14		15-44		45+		Unknown Age/Sex		
Month	M	F	M	F	M	F	M	F			
J 1968	0	0	0	0	0	0	0	0	0	169	169
F	0	0	0	0	0	0	0	0	0	589	589
M	0	1	0	0	1	1	0	0		222	225
A	0	0	0	0	1	0	0	0		491	492
M	0	0	0	0	2	0	0	0		236	238
J	0	0	0	0	0	0	0	0		114	114
J	0	1	2	0	2	2	0	0		7	14
A	0	1	0	0	1	0	0	0		73	75
S	1	0	0	0	2	1	0	0		62	66
O	0	2	2	1	3	0	0	0		33	41
N	3	1	2	2	1	3	0	0		10	22
D	0	0	1	1	2	1	0	0		2	7
J 1969	0	2	5	0	3	2	1	0		47	60
F	4	1	1	3	4	4	0	0		78	95

TABLEAU 4. VACCINATIONS ANTIVARIOLIQUES EFFECTUEES, PAR DIVISION GEOGRAPHIQUE
(Divisions indiquées par les cartes)

TABLE 4. SMALLPOX VACCINATIONS PERFORMED BY GEOGRAPHIC SUBDIVISIONS
(those shown on country maps)

Division géographique Geographic Subdivisions	1967	1er trim. 1968 First Quarter	2ème trim. 1968 Second Quarter	3ème trim. 1968 Third Quarter	4ème trim. 1968 Fourth Quarter	J-F 1969	Total général* Grand total*
Adamawa Prov.						71 425	71 425
Bauchi "					1 530 773	675 247	2 206 020
Benue "							
Bornu "				2 058 903	95 488	422 184	2 576 575
Ilorin "							
Kabba "						349 309	349 309
Kano State	57 838	316 093	3 615 293	1 561 347	19 924	300 749	5 871 244
Katsina Prov.		2 749 824					2 749 824
Niger "					103 880		103 880
Plateau "					17 529		17 529
Sardauna "							
Sokoto "	4 003 345	148 050		32 069			4 183 464
Zaria "	90 967			5 000	36 167	14 249	146 383
Total	4 152 150	3 213 967	3 615 293	3 657 319	1 803 761	1 833 163	18 275 653

* Englobant le total depuis la mise en oeuvre du programme.

* Includes the total since the inception of the programme.

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TABLEAU 6. CAS DE ROUGEOLE DECLARES DE JANVIER 1968 JUSQU'A FEVRIER 1969 COMPRIS
TABLE 6. REPORTED MEASLES CASES JANUARY 1968 (THROUGH FEBRUARY 1969)

Division géographique	Nombre de cas par mois/Number of cases by month													1969		
	1968													Total	J	F
	J	F	M	A	M	J	J	A	S	O	N	D	Total			
Semaines/Weeks	1-5	6-9	10-13	14-17	18-22	23-26	27-31	32-35	36-39	40-44	45-48	49-52		1-5	6-9	
Adamawa Province	31	177	69	113	44	49	34	35	52	6		73	683		106	
Bauchi "	17	29	201		47	109	105	70	11	3	36	98	726	66	5	
Benue "	27	50	103	205	274	283	572	1 293	203	79	119	98	3 306	59	131	
Bornu "	312	555	330		258	282	41	130	1	4	2	2	1 917	1	0	
Ilorin "	52	81	59	141	36	27		52	29	12	0	2	491	0	0	
Kabba "	207	275	307	97	245	520	126	154	88	42	297	370	2 728	179	183	
Kano State	500	1 569	523	3 682	479	388	184	133	52	103	103	53	7 769	120	207	
Katsina Province	579	674	704	564	602	315	95	98	26	80	119	17	3 873	27	78	
Niger "	30	55	50		25	17	30	53	33	45	88	77	503	77	199	
Plateau "	365	741	330	233	181	401	290	335	286	340	291	393	4 186	228	386	
Sardauna "	34	64	140	68	151	343	217			46	0	4	1 067	79	82	
Sokoto "	531	302	332	772	103	396	244	419	82	35	129	466	3 811	247	355	
Zaria "	280	268	256	321	178	147	615	530	144	149	206	259	3 353	533	735	
Total	2 965	4 840	3 404	6 196	2 623	3 277	2 553	3 302	1 007	944	1 390	1 912	34 413	1 616	2 467	

FIGURE 1
(1.4)

NIGERIA - NORTHERN STATES
(with Provincial Boundaries)

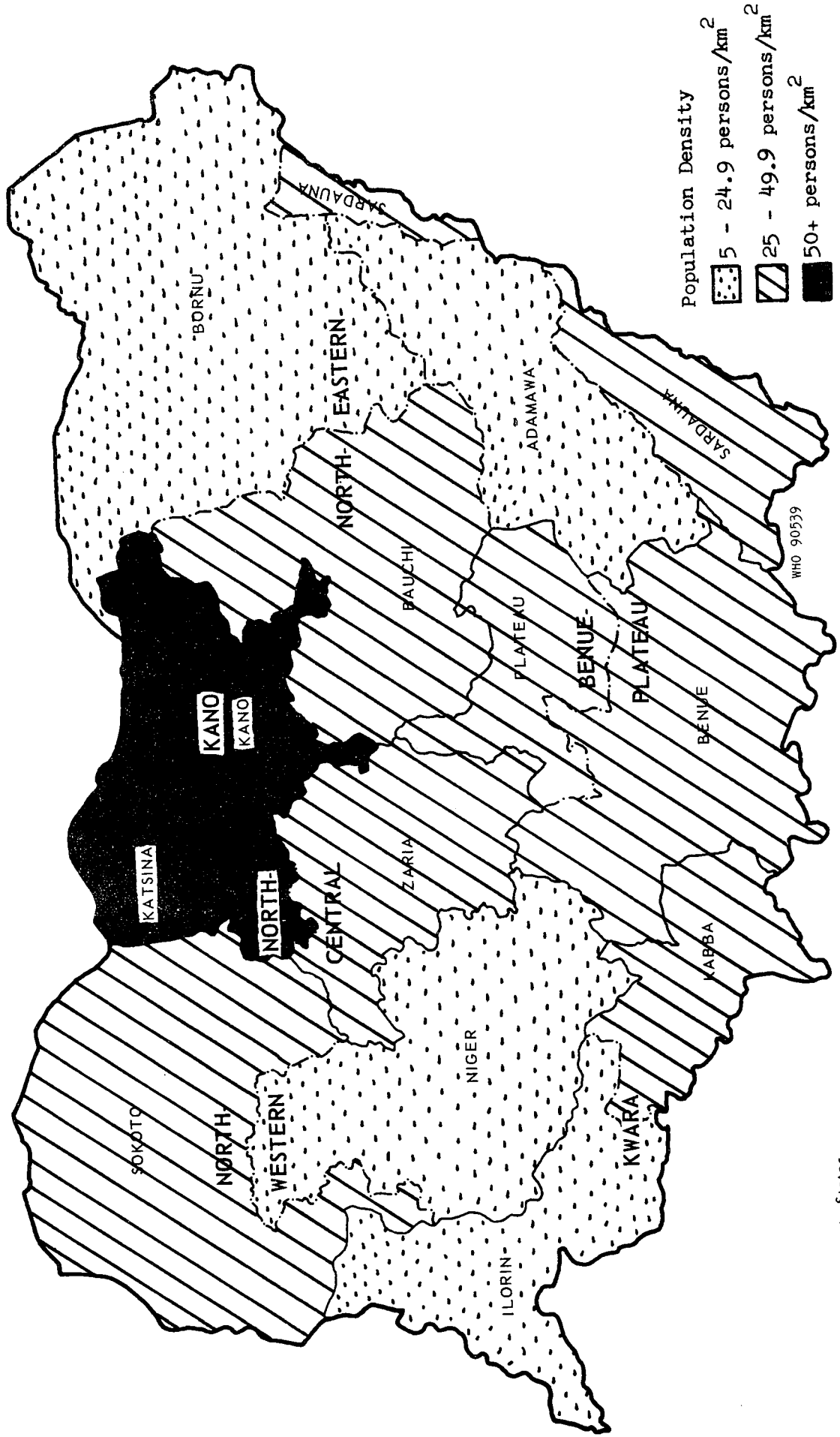
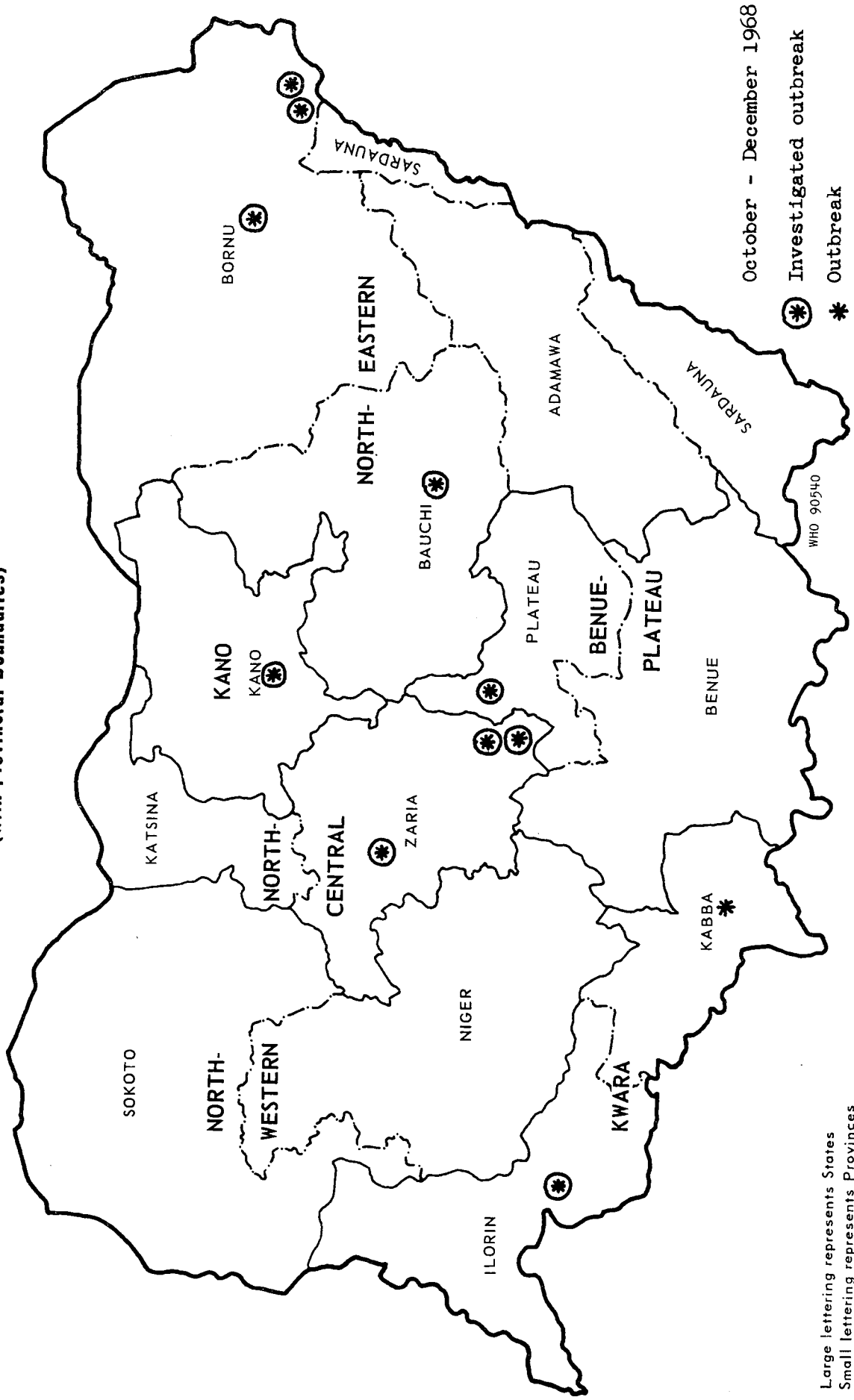


FIGURE 2
(2.2)

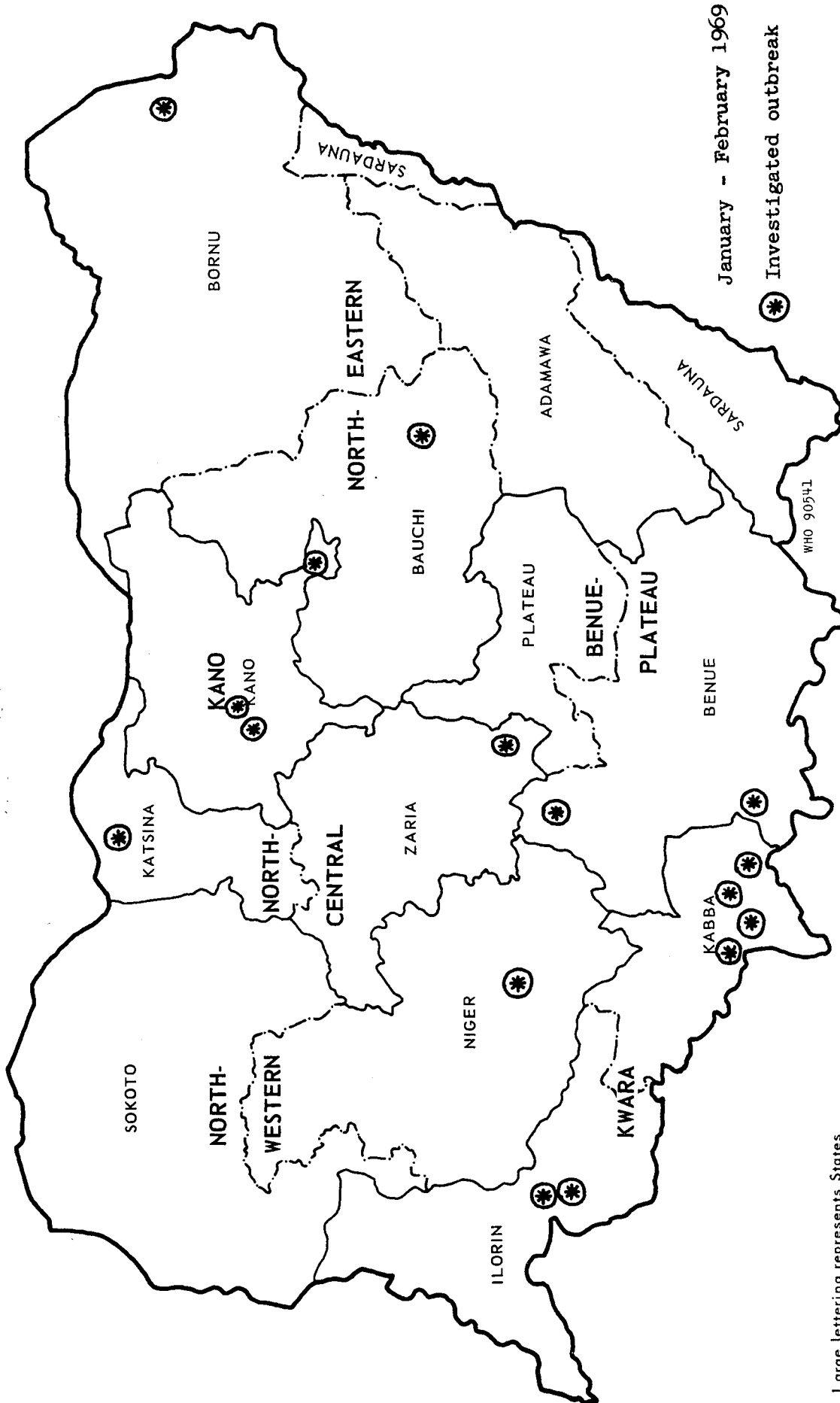
NIGERIA – NORTHERN STATES
(with Provincial Boundaries)



Large lettering represents States
Small lettering represents Provinces

FIGURE 3
(2.2)

NIGERIA - NORTHERN STATES
(with Provincial Boundaries)



Large lettering represents States
Small lettering represents Provinces

January - February 1969

Investigated outbreak

WHO 90541

FIGURE 4
(2.3)

NIGERIA - NORTHERN STATES
(with Provincial Boundaries)

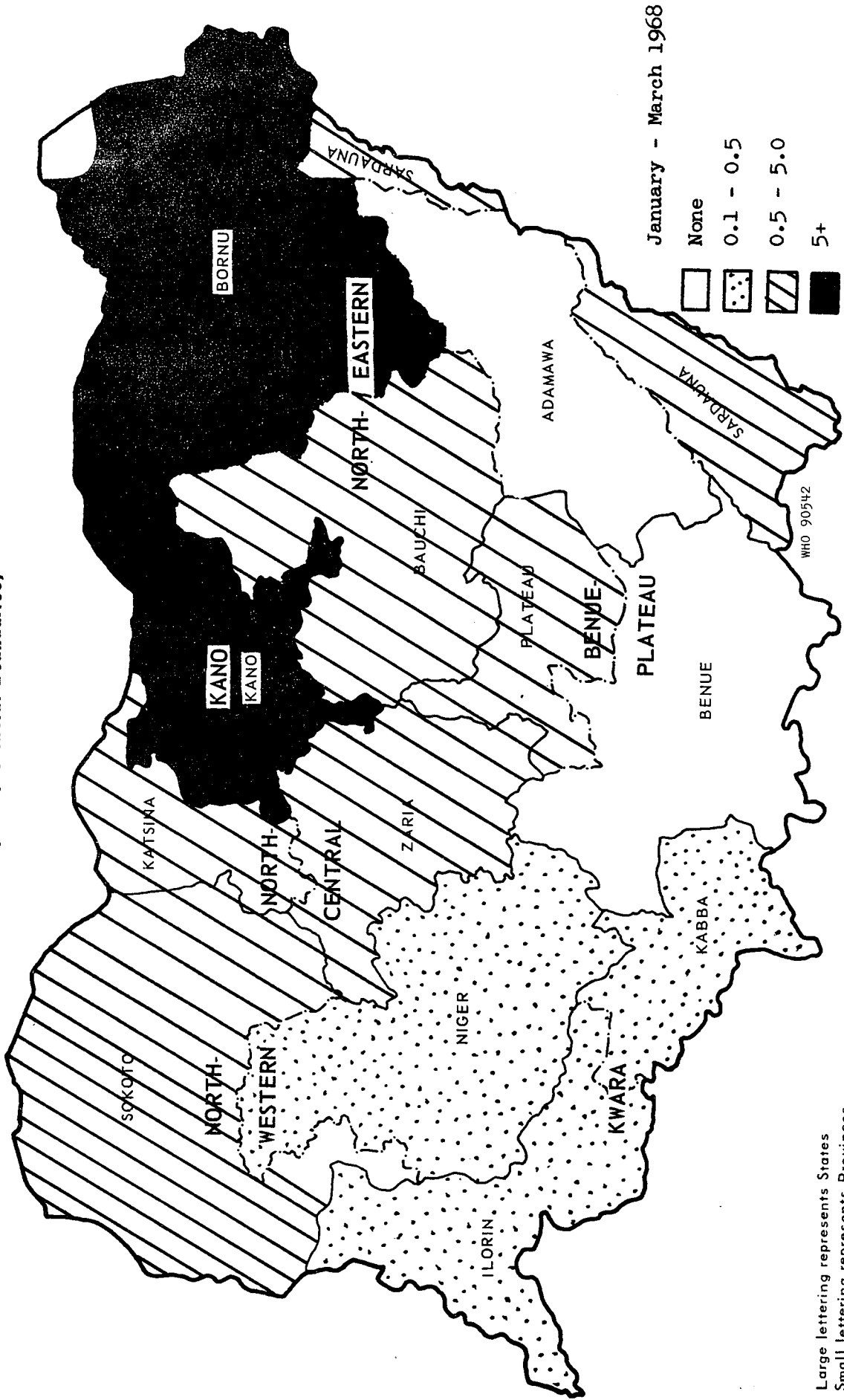


FIGURE 5
(2.3)

NIGERIA – NORTHERN STATES
(with Provincial Boundaries)

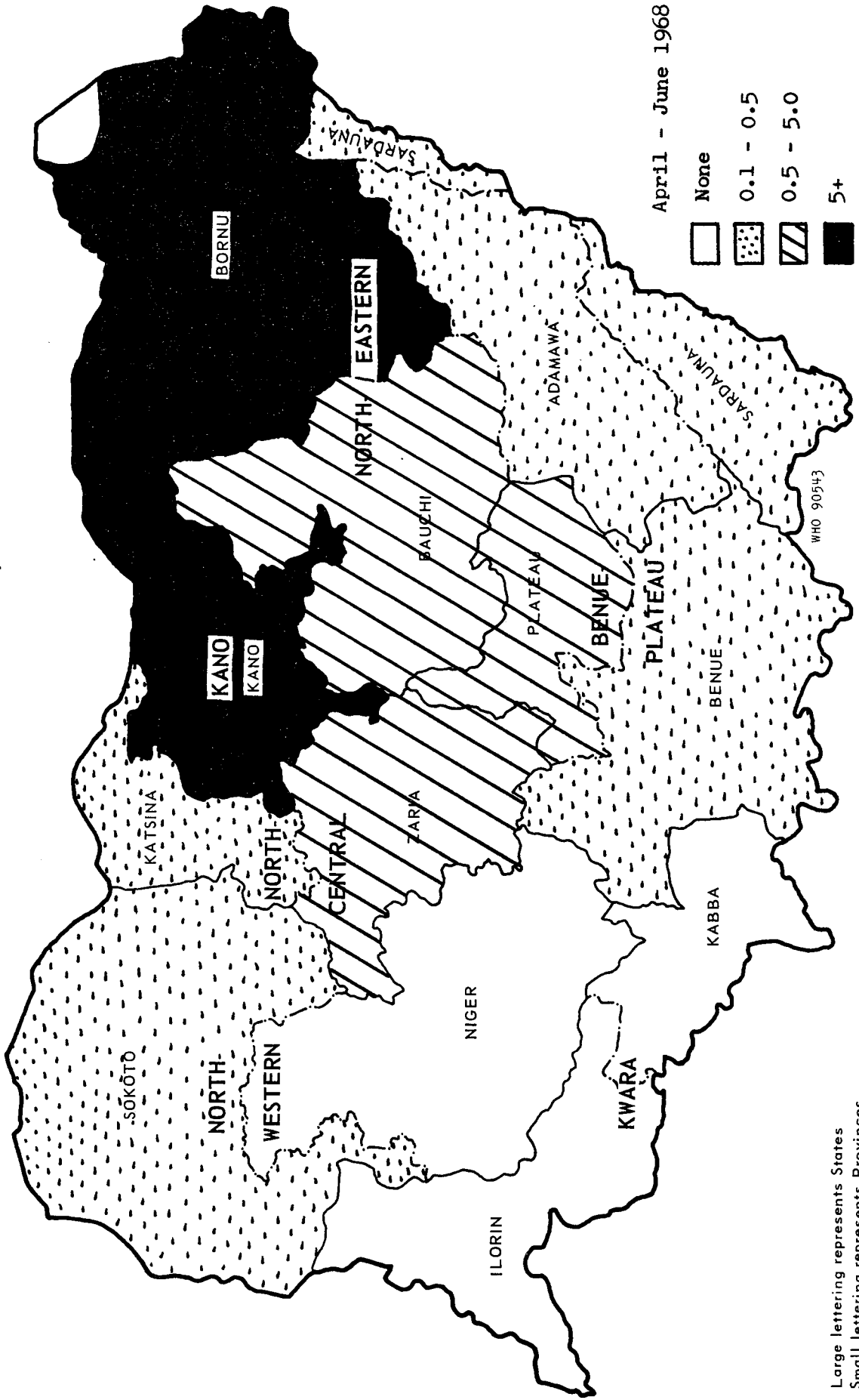


FIGURE 6
(2.3)

NIGERIA – NORTHERN STATES
(with Provincial Boundaries)

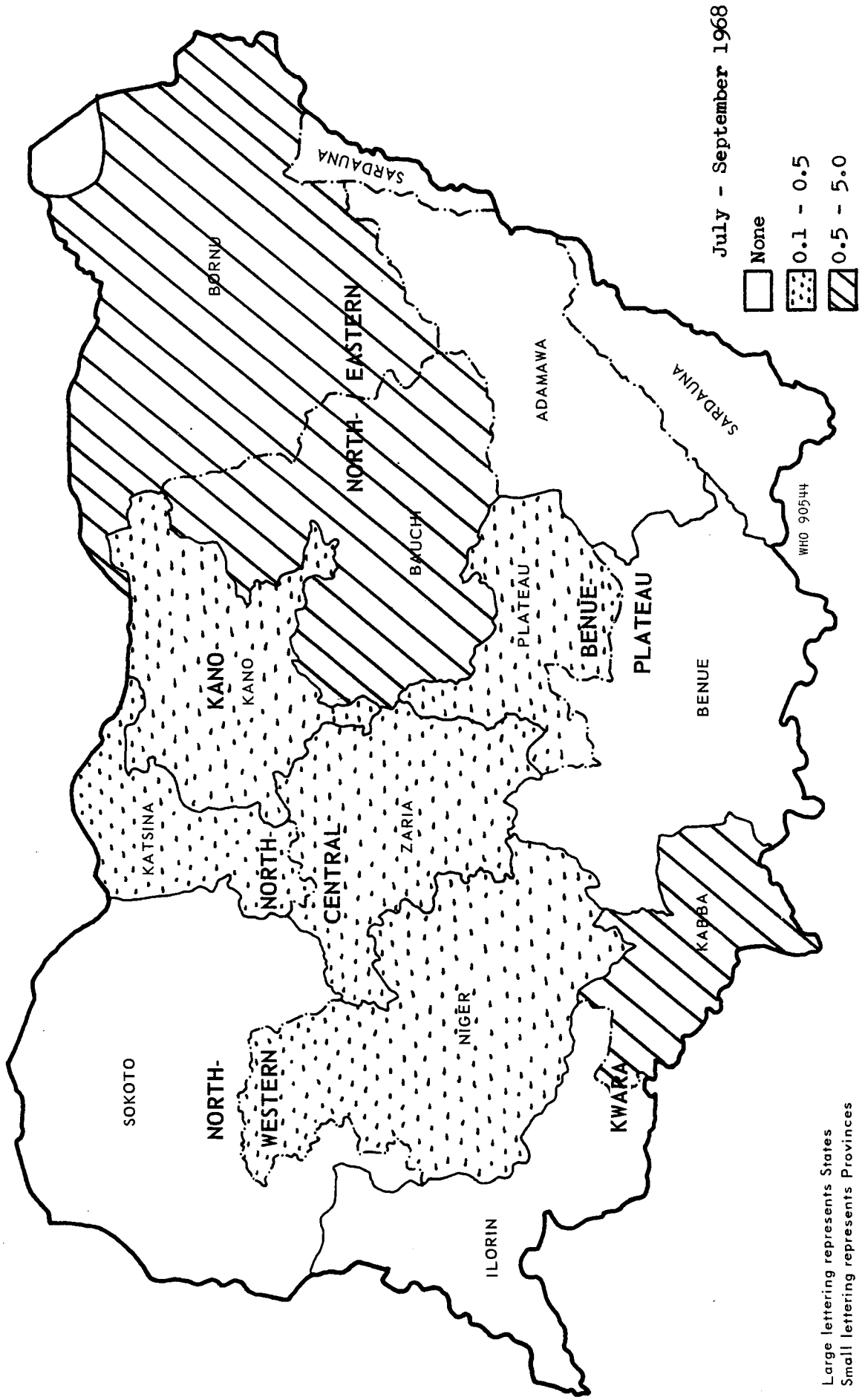


FIGURE 7
(2.3)

NIGERIA – NORTHERN STATES
(with Provincial Boundaries)

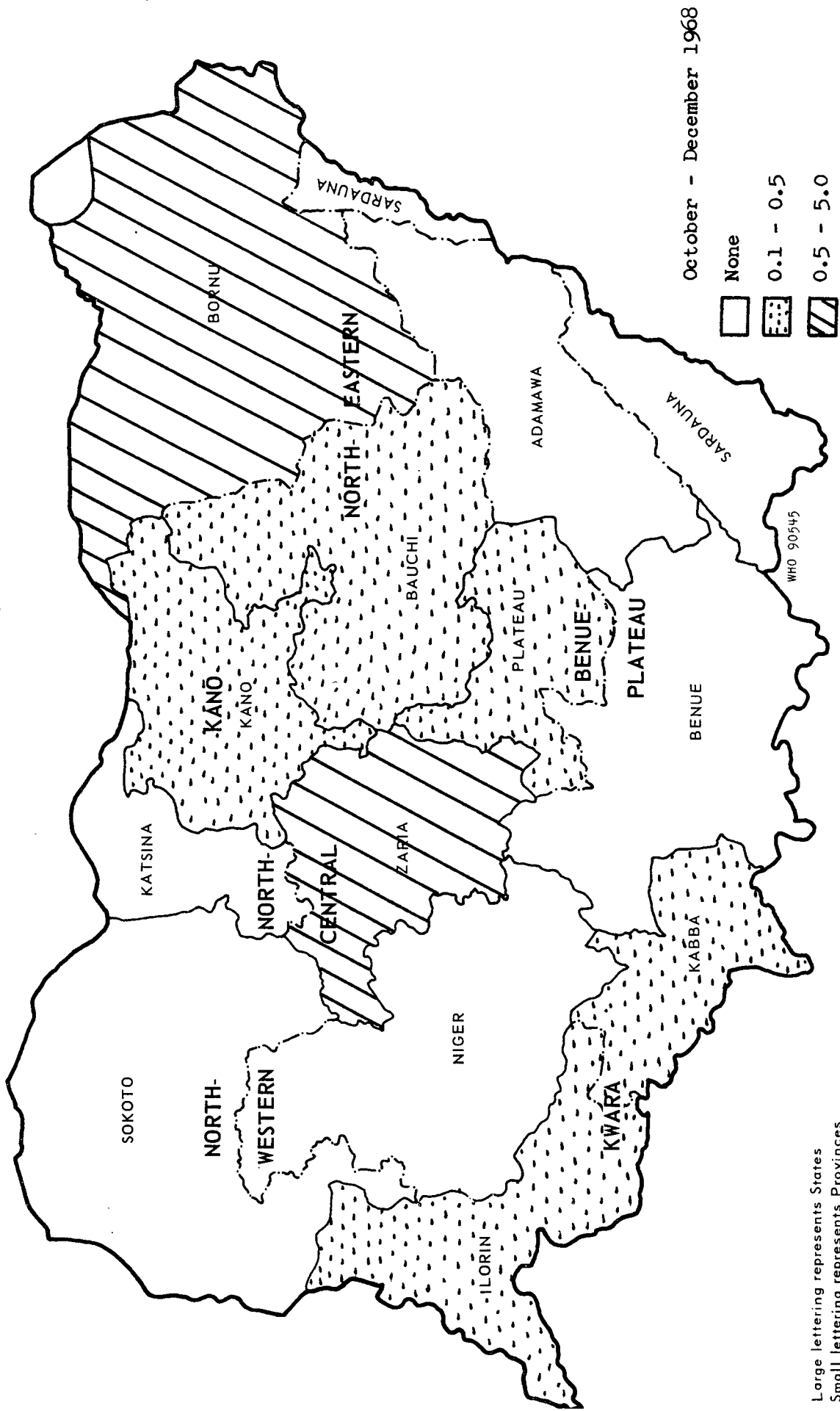


FIGURE 8
(2.3)

NIGERIA – NORTHERN STATES
(with Provincial Boundaries)

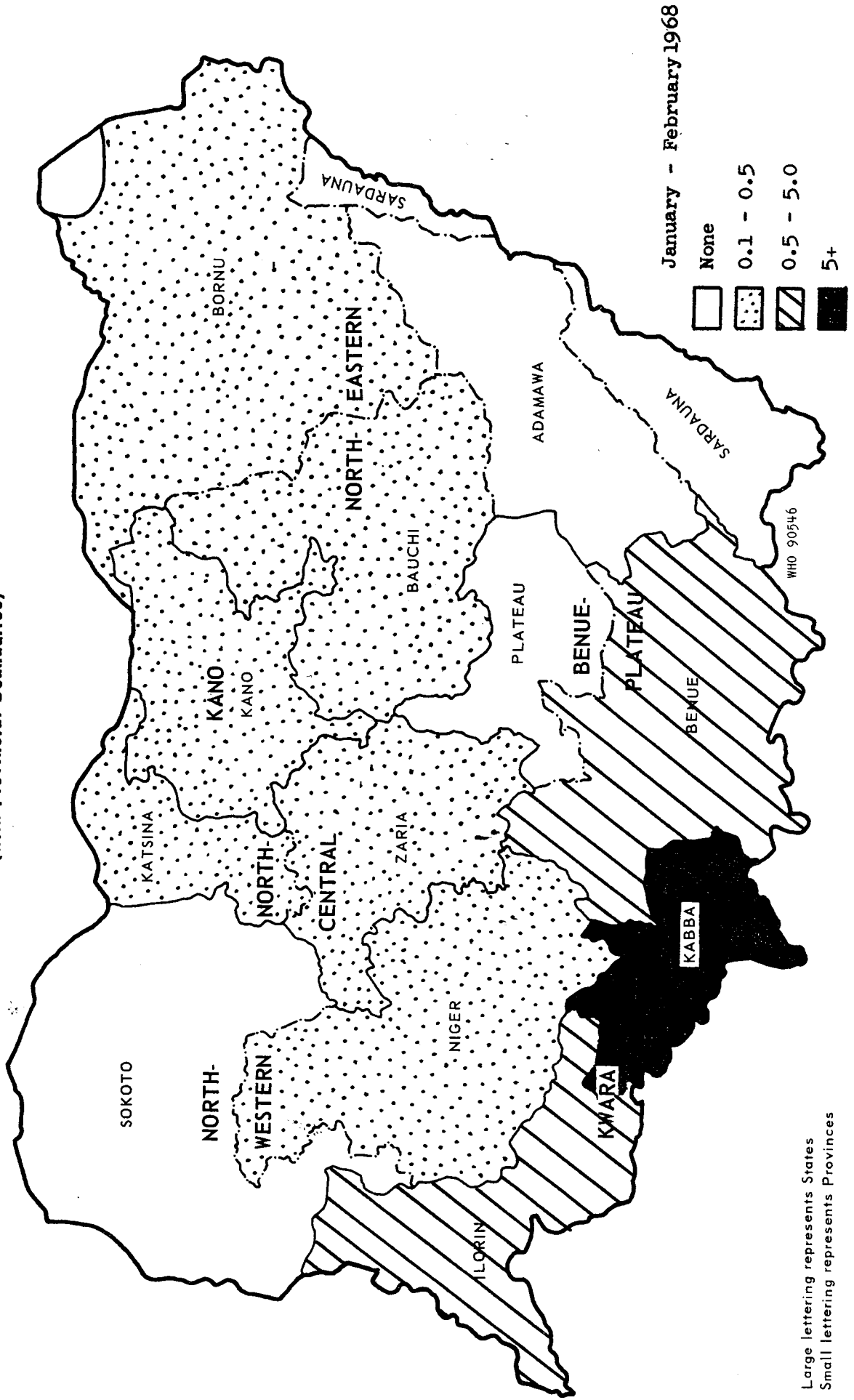
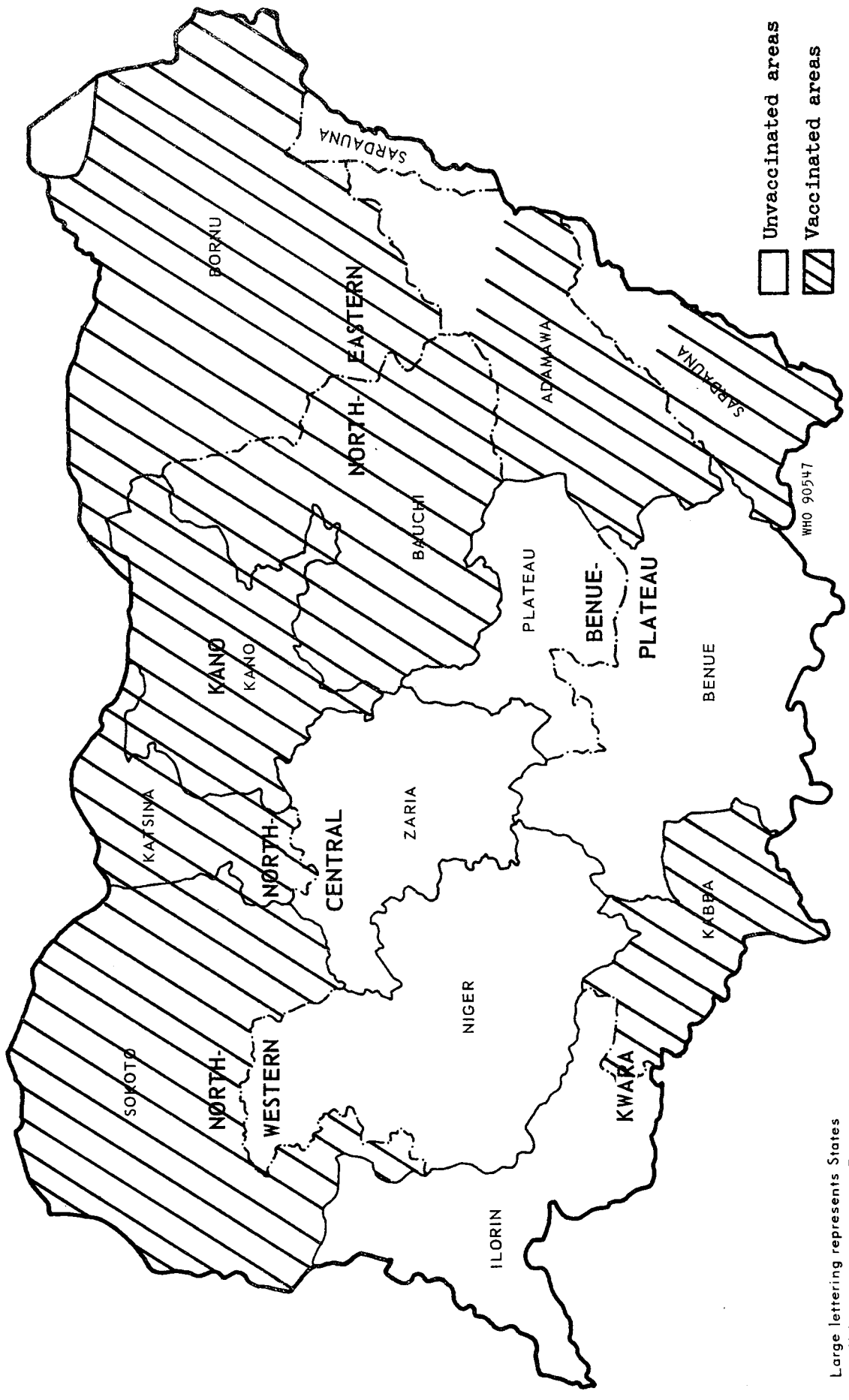


FIGURE 9 and 10
(2.6 and 3.3)

NIGERIA - NORTHERN STATES
(with Provincial Boundaries)



Large lettering represents States
 Small lettering represents Provinces