



INTER-REGIONAL SEMINAR ON SMALLPOX ERADICATION

Lagos, Nigeria, 13-20 May 1969

COUNTRY REPORT



1.0 DEMOGRAPHIC DATA

1.1 Estimated population (July 1969)

Age	
0-4	1 615 000
5-14	2 124 000
15-44	3 301 000
45+	1 003 330
TOTAL	8 043 330

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 2)

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

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(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 months as a rule  
At birth by midwives in rural areas

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>10</u>
Maintenance teams	<u>2</u>
Other (Specify)	_____
TOTAL	<u>12</u>

Other field staff, including recorders, drivers, etc. 45

Supervisory personnel (paramedical) 12

4.2 Number of vaccinators directly supervised by one supervisor 4

4.3 Average number of vaccinations performed daily by each team:

Regular teams 3 000

Maintenance teams \_\_\_\_\_

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: 14 days per mo.

Other levels: 10 days per mo.

By advisory staff reviewing work of -

Vaccination team: 10 days per mo.

Other levels: 14 days per mo.

5.1.2 Measures taken when vaccinator or assessor performance is unsatisfactory  
Reprimand

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 Varies from place to place

Steps taken when the proportion of successful primary vaccination falls below 95% Revaccination - so far not been necessary

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.

         - %

Steps taken if the coverage is not acceptable (i.e. revaccinate the area etc.) Revaccinate

Changes which have been made in the programme as a direct result of assessment Increased use of multiple pressure teams

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) \_\_\_\_\_

Frequency of reporting:

Immediate  Weekly  Other \_\_\_\_\_

Number of reports: Expected in 1968 At Headquarters level 468

Received in 1968 520

% received 100%

Negative reporting is generally practised: Yes  No

Other specialized programmes which report cases

Yaws Teams report

Other persons or groups who have been requested to notify cases

Parsons, teachers, village headmen, others

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

100 %

Best estimate of the percentage of cases which are reported:

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

5.3.2 Case investigation and containment measures:

Number of case investigation/containment ('fire-fighting') teams which have been established 10

These teams are: Centralized  Decentralized

If decentralized, to what extent Each Region has its own team.

A central team assists where necessary.

Proportion of cases, since October 1968, in which containment action was taken within 48 hours after notification 100 %

Proportion of outbreaks, since October 1968, routinely investigated to determine the origin of infection 100 %

Of the investigations noted above, the percentage of outbreaks where the origin was not ascertained 0 %

6.0 COMMODITIES

6.1 Vaccine use: Col. 1 Number of Doses Recd. Col. 2 Number of Doses in Inventory Col. 3 Number of Doses Used (Col.1-Col.2) Col. 4 Number of Vacc. performed Reasons for Difference between Col.3 and Col.4

Year	Col. 1	Col. 2	Col. 3	Col. 4	Reasons for Difference between Col.3 and Col.4
1967	1 500 000			1 247 186	Behind schedule
1968	1 750 000			1 924 845	1967 supplies used in addition to 1968
1969*	1 100 000				

Smallpox vaccine

Measles vaccine

1967	320 000			117 703	No returns received from hospitals & clinics supplied for maintenance vaccination
1968	400 000			475 335	
1969*	200 000				

\* January and February only

6.2 Equipment:

<u>Item</u>	<u>Number Supplied</u> *	<u>Number in Operation</u>	<u>Comment</u>
Trucks	15	13	Two under repair
Ped-o-Jets	43	43	
Refrigerators	4	4	
Motorbikes	8	7	One under repair

\* Since inception of the programme.

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

TABLEAU 1. DONNEES DEMOGRAPHIQUES PAR DIVISION GEOGRAPHIQUE  
(Utiliser les divisions indiquées par les cartes)

TABLE 1. DEMOGRAPHIC DATA BY GEOGRAPHIC SUBDIVISION  
(Use Subdivisions as shown on Country Maps)

Division géographique	Population approximative en 1969	Superficie (en km <sup>2</sup> )	Densité de population au km <sup>2</sup>
Geographic Subdivisions	Est. 1969 Population	Area (Square kms)	Population density per square km
Upper Region	1 609 681	98 209	16
Northern Region			
Brong-Ahafo Region	734 230	40 080	18
Ashanti Region	1 385 150	24 349	56
Eastern Region	1 366 501	19 997	68
Volta Region	970 717	20 546	47
Central Region	1 720 368	33 665	51
Western Region			
Accra Region	614 217	2 589	237
Total	8 400 864	239 435	35

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 pas mois/Number of cases by month														
	1968													1969	
Geographic Subdivisions	J	F	M	A	M	J	J	A	S	O	N	D	Total	J	F
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
Upper Region	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Northern Region	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Brong-Ahafo Region	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ashanti Region	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Eastern Region	-	-	-	-	-	-	16	-	-	-	-	-	16	3	2
Volta Region	-	1	-	1	-	-	-	-	-	-	-	-	2	-	-
Central Region	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Western Region	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Accra Region	-	-	2	-	-	2	2	-	-	-	-	-	6	-	-
Total	-	1	2	1	-	2	18	-	-	-	-	-	24	3	2

PAYS GHANA  
COUNTRY

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	-	-	-	-	-	-	-	-	-	-	
F	-	-	-	-	1	-	-	-	-	-	1
M	-	1	-	1	-	-	-	-	-	-	2
A	-	-	-	-	1	-	-	-	-	-	1
M	-	-	-	-	-	-	-	-	-	-	
J	1	-	1	-	-	-	-	-	-	-	2
J	3	1	7	3	1	3	-	-	-	-	18
A	-	-	-	-	-	-	-	-	-	-	
S	-	-	-	-	-	-	-	-	-	-	
O	-	-	-	-	-	-	-	-	-	-	
N	-	-	-	-	-	-	-	-	-	-	
D	-	-	-	-	-	-	-	-	-	-	
J 1969	-	-	1	-	1	-	1	-	-	-	3
F	-	-	-	-	2	-	-	-	-	-	2











# MAP 1. HEALTH DISTRICTS GHANA

## UPPER REGION

1. Wa District
2. Lawra District
3. Tumu District
4. Navrongo District
5. Bawku
6. Zuarungu

## NORTHERN REGION

7. Tamale Town
8. Western Gonja District
9. Eastern Gonja District
10. Dagomba District
11. Mamprusi District

## BRONG-AHAFO REGION

12. Atebubu District
13. Wenchi District
14. Sunyani District

## ASHANTI REGION

15. Mampong District
16. Bekwai District
17. Kumasi District
18. Kumasi City Area

## WESTERN REGION

19. Sefwi District
- 20.
21. Ahanta-Nzima District
22. Sekondi-Takoradi City Area
23. Takoradi Airport Port

## CENTRAL REGION

24. Winneba District
25. Winneba Town
26. Cape Coast District
27. Cape Coast Municipal

## EASTERN REGION

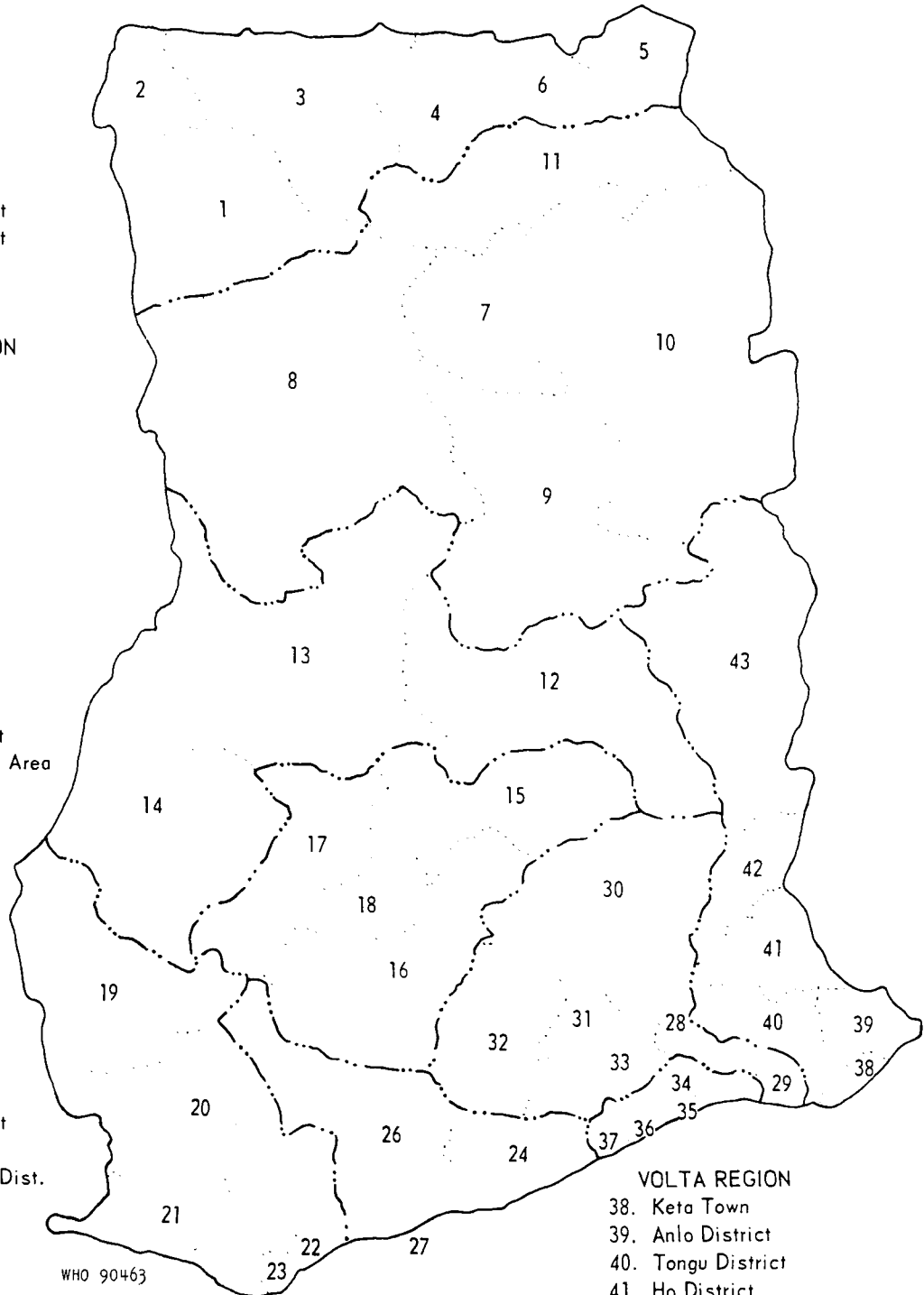
28. Volta River District
29. Ada District
30. Kwahu District
31. Akim Abuakwa District
32. West Akim District
33. Akwapim New Juaben Dist.

## ACCRA REGION

34. Accra District
35. Tema Area-Port
36. Accra City Area
37. Accra Airport

## VOLTA REGION

38. Keta Town
39. Anlo District
40. Tongu District
41. Ho District
42. Kpandu District
43. Buem-Krachi District



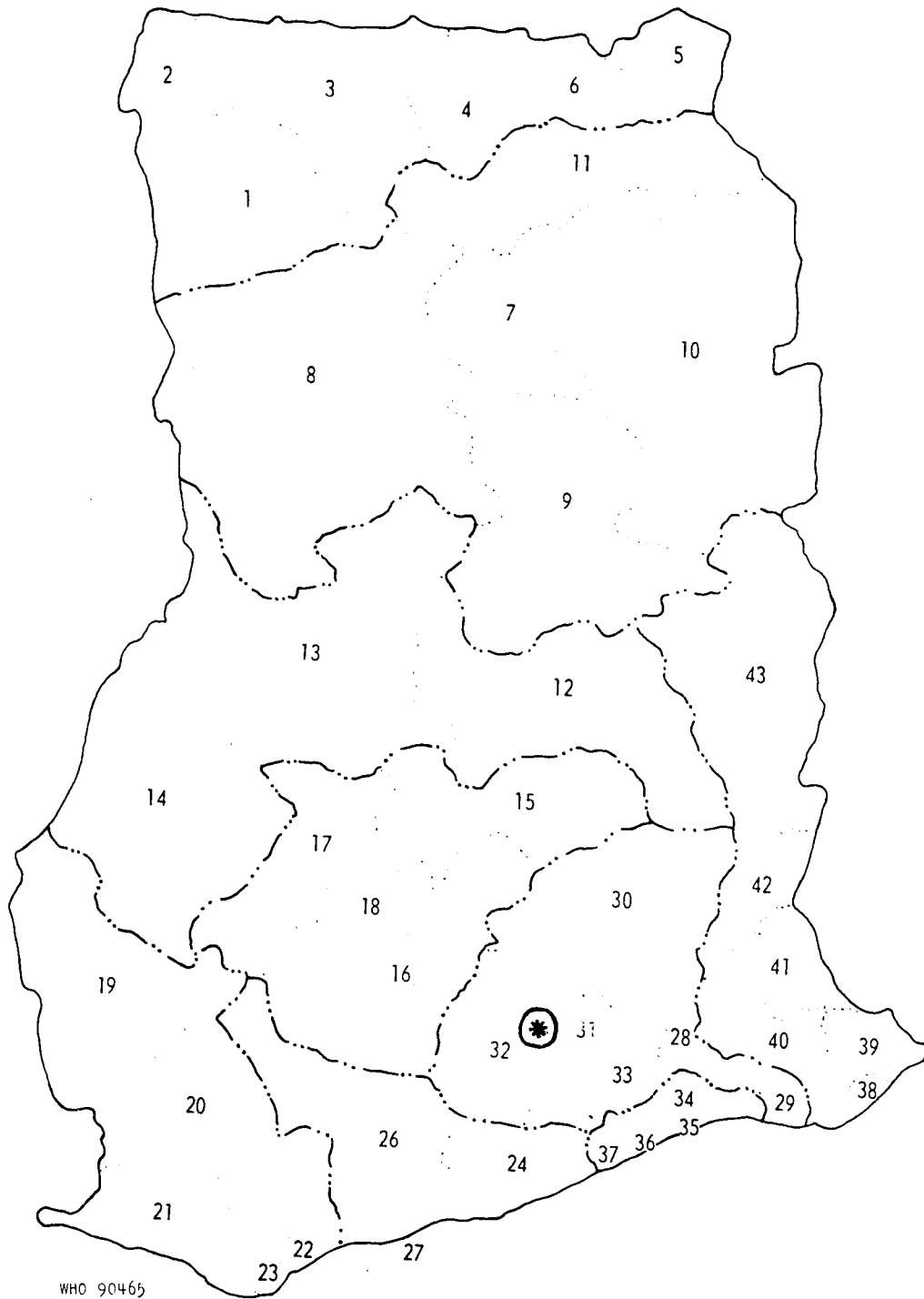
GHANA

Figure 1  
(1.4)



GHANA

Figure 3  
(2.2)



WHO 90465

⊛ Investigated outbreak

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Figure 9 and 10  
(2.6 and 3.3)

