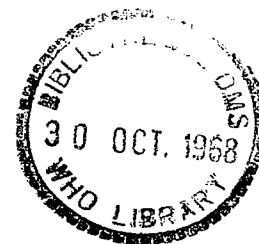




WORLD HEALTH ORGANIZATION
ORGANISATION MONDIALE DE LA SANTÉ

INDEXED



SMALLPOX ERADICATION SEMINAR

Kinshasa, 19-26 November 1968

STATUS OF SMALLPOX ERADICATION ACTIVITIES

COUNTRY BOTSWANA

1. Demographic data

1.1 Estimated population (1967)

<u>Age</u>	<u>Male</u>	<u>Female</u>	<u>Total</u>
0-4	<u>49 249</u>	<u>51 957</u>	<u>101 206</u>
5-14	<u>73 979</u>	<u>78 395</u>	<u>152 374</u>
15 and over	<u>165 610</u>	<u>173 810</u>	<u>339 420</u>
TOTAL	<u>288 838</u>	<u>304 162</u>	<u>593 000</u>

1.2 Proportion of population which is nomadic .0026 %

2. Smallpox incidence and vaccination data

2.1 Annual smallpox incidence by Province/Region (1958-1967) - (Table 1)

2.2 Monthly smallpox incidence (1964-1968) - (Table 2)

2.3 Smallpox cases by age, sex and vaccination status - 1967 - (Table 3)

2.4 Vaccinations performed by Province/Region (1966-1968) - Table 4)

3. Vaccine

3.1 Liquid vaccine

Amount of liquid vaccine still being used (% of total) - 1967 0
1968 0

3.2 Freeze-dried vaccine

<u>Sources (producers) - 1968</u>	<u>Amount</u>
<u>State Laboratories Cape Town</u>	<u>10 000 doses</u>
<u>Lister Institute, U.K.</u>	<u>2 000 doses</u>

3.3 Vaccine storage

3.3.1 All vaccine at the central depot continuously stored at less than 10°C
Yes No

3.3.2 Adequate refrigeration facilities in the interior of the country to permit storage at less than 10°C
Yes No

3.3.3 All vaccine used less than 30 days after removal from refrigerated storage
Yes No

4. Vaccination

4.1 Personnel engaged in vaccinations:

4.1.1 Vaccinators _____
Other field staff, including recorders, drivers, etc. . . _____
Supervisory personnel (paramedical) _____
Supervisory personnel (medical officers) _____

4.1.2 Organization of vaccination effort
 House to house: Collecting points
 Vaccinators working alone;
 Vaccinators working in teams
 Other _____

4.1.3 Number of vaccinators directly supervised by one supervisor _____

4.1.4 Average number of vaccinations performed daily by each vaccinator or team _____

4.1.5 Vaccination targets by Province/Region, 1968-1970 - (Table 5)

4.2 Technique of vaccination used now:

	<u>Percentage performed by this method</u>
4.2.1 Multipuncture (bifurcated needle)	_____
Ped-O-Jet	_____
Other (specify) <u>Scratch</u>	<u>Majority</u>

4.2.2 Usual preparation of skin before performing vaccination, (i.e. water, nothing, etc.)
Nothing or spirit

4.2.3 Method of sterilization of vaccination instrument
 Boiling Flaming None

4.3 Reconstituted vaccine used only on the day on which it is reconstituted

Yes No

4.4 Method for recording of vaccinations (please attach sample of sheets used for recording of vaccinations)

Tally sheet (vaccinees recorded only by age, sex, vaccination status)

Yes No

Other registry system (specify) Until April 1968 totals only kept.

4.5 Youngest age for beginning vaccination

Birth _____
Three months X
Other _____

4.6 Contra-indications to vaccination other than severe, acute illness

No Yes - specify _____

5. Programme

5.1 Supervision

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

- (a) By staff at Territory/District level _____ %
- (b) By staff at Regional/Provincial level > 2 %
- (c) By staff at National level > 0.5 %

5.1.2 Measures taken when vaccinator performance is unsatisfactory (e.g. reprimand, suspension, dismissal) 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 _____ %

Steps taken when the proportion of successful primary vaccinations falls below 95% No record

5.2.2 Vaccination coverage

5.2.2.1 Vaccinations performed in each village or area are compared with population estimated to be in area (e.g. village register, census data, other)

Yes No

5.2.2.2 Assessment of coverage regularly performed in a sample of the population

Yes

No

When coverage in the 0-4 or 5-14 year age-group is less than 85%, the following steps are taken:

5.3 Surveillance

5.3.1 Notification of smallpox cases

5.3.1.1 Notification sites

(a) Number of sites which may notify cases of smallpox (e.g. hospitals, health centres, health posts, dispensaries) 36

(b) Number which report at least every two weeks whether or not smallpox cases were observed Nil

(c) Other specialized programmes which report cases (e.g. malaria, yaws, etc. - specify) _____

(d) Other persons or groups who have been requested to notify cases (e.g. teachers, village headmen, etc. - specify) _____

5.3.1.2 Proportion of cases for which age, sex and vaccination status are recorded No cases

5.3.1.3 Best estimate of the percentage of cases which are reported

More than 90%	<u>X</u>
75-90%	_____
50-75%	_____
Less than 50%	_____

5.3.2 Case investigation and containment measures

Case investigation - containment teams ("fire-fighting" teams) have been established in each Province/Region

Yes

No

Proportion of cases in which containment action (verification, vaccination, isolation, etc.) taken within 48 hours after notification _____%

Proportion of cases routinely investigated to determine the origin of infection _____%

7. Describe briefly (two pages) the administrative organization and method of execution of the programme with organizational chart. Discuss specifically with reference to component activities in Table 6. (Attach samples of posters and pamphlets being used in programme.)

Botswana may be considered to be in Phase 3 or the Maintenance Phase of Smallpox Eradication.

Vaccination is continuing and is given to all travellers and to all children receiving BCG vaccination except the newly born, and to those receiving diphtheria, whooping cough or tetanus inoculations.

Surveillance All health units are required to notify suspected cases of smallpox immediately. Chief and headman also do this.

Field Investigation is carried out in the first instance by the Health Inspector. Depending on circumstances the Medical Officer of Health may take over the investigations. Specimens from suspected cases are examined by a laboratory, this was not done with the case reported in 1967.

Containment Intensive vaccination in community where outbreaks occur and isolation of cases where possible.

Administration The Medical Officer of Health is in overall charge and has Health Inspectors stationed at Lobatsi, Geberones, Serowe, Francistown and Maun. These Health Inspectors arrange periodic vaccination programmes and routine vaccination of travellers. Cases are generally reported to the Medical Officers and investigation is carried out by Health Inspectors.

2.2

TABLE 2 - Smallpox Incidence by month or four week period
 TABLEAU 2 - Incidence de la variole par mois ou période de quatre semaines

YEAR ANNEE	Jan. Jan.	Feb. Fév.	Mar. Mars	April Avril	May Mai	June Juin	*	July Juil.	Aug. Août	Sept. Sept.	Oct. Oct.	Nov. Nov.	Dec. Déc.	Total
Weeks Semaines	1-4	5-8	9-12	13-16	17-20	21-24	25-28	29-32	33-36	37-40	41-44	45-48	49-52	
1964														175
1965														
1966														
1967	1													1
1968														
TOTAL														176

* Use this column only if reporting by four week periods
 * N'utiliser cette colonne que si les chiffres correspondent à des périodes de quatre semaines

TABLE 3. CASES BY AGE, SEX AND VACCINATION STATUS - 1967
 TABLEAU 3. CAS DE VARIOLE PAR AGE ET SEXE, ET PAR ETAT DE VACCINATION - 1967

I. Check this box if there were no smallpox cases during 1967.
 Cocher cette case s'il n'y a pas eu de cas de variole en 1967.

II. SMALLPOX CASES BY AGE AND SEX, AND VACCINATION STATUS
 CAS DE VARIOLE PAR AGE ET SEXE, ET PAR ETAT DE VACCINATION

Age Group Groupe d'âge	Number of cases - Nombre de cas			Number vaccinated before exposure Nombre de vaccinés avant l'exposition		
	Male Sexe Masculin	Female Sexe Féminin	Unknown Sexe non précisé	Vac. Vaccinés	Not vac. Non vaccinés	Unknown Antécédents vaccinaux inconnus
< 1						
1-4						
5-14						
15+						
Unknown Age inconnu		1				1
TOTAL		1				1

If detailed information is not available for all cases, complete as far as possible.
 En l'absence de renseignements détaillés sur tous les cas, remplir la formule dans toute la mesure du possible.

TABLE 6

	ATTACK PHASE (PHASE 1)	CONSOLIDATION PHASE (PHASE 2)	MAINTENANCE PHASE (PHASE 3)
DEFINITION	Endemic areas with an incidence of smallpox of five or more cases per 100 000 population per year and with less than 80% of all segments of the population showing scars of primary vaccination.	Areas with an incidence of smallpox of less than five cases per 100 000 and in which over 80% of all segments of the population show scars of primary vaccination.	Areas free from endemic smallpox for more than two years but geographically situated in an endemic continental area, presently Africa, Asia or South America.
VACCINATION	Systematic mass vaccination.	Continuing maintenance vaccination.	Continuing maintenance vaccination.
SURVEILLANCE	<u>Reporting</u> Establish prompt and regular reporting of smallpox by existing health facilities. <u>Field investigation</u> Investigation of major outbreaks or outbreaks occurring in smallpox-free areas.	<u>Reporting</u> Extension of case detection system to assure reporting of all suspect smallpox in all segments of the population. <u>Field investigation</u> All cases and outbreaks promptly investigated epidemiologically to establish source of infection and unreported cases. Investigation forms submitted for every case.	<u>Reporting</u> Extension of case detection system to assure reporting of all suspect smallpox in all segments of the population <u>Field investigation</u> Each case investigated promptly as an emergency by a competent epidemiologist.
LABORATORY	Establish techniques and methods for the submission and examination of specimens for confirmation of diagnosis.	Specimens studied from all isolated cases and representative samples from each outbreak.	Specimens studied from every suspect case.
CONTAINMENT	Localized, intensive vaccination in community where cases or outbreaks occur. Isolation of cases if feasible.	Vaccination and observation of case contacts. Isolation of cases and appropriate disinfection. Localized, intensive vaccination in community.	Vaccination and observation of case contacts. Isolation of cases and appropriate disinfection. Localized, intensive vaccination in community.

ACTIVITIES