



SMALLPOX ERADICATION IN THE
 REPUBLIC OF DJIBOUTI
 STATUS REPORT - 23 NOVEMBER 1978



1. Introduction

Djibouti (formerly the French territory of the Afars and Issas) is situated on the Red Sea, consists mostly of arid desert and has an area of only 23 000 km². An average estimate of the population is around 170 000 of whom 120 000 live in Djibouti and 10 000 in four other main centres. Administratively the country is divided into four "cercles" and Djibouti district.(figure 1) The nomadic population is under the control of the "Groupement Nomade", a military organization concerned with administrative functions of this group, particularly in border areas.

The population has two principal ethnic groups, the Afars in the north-west, and the Issas in the south-east. The latter predominate in Djibouti town.

2. Smallpox in Djibouti

2.1 Epidemiology

Djibouti is of importance to the current global smallpox eradication programme due to its location on the border between Somalia and Ethiopia. There were an estimated 7 000 refugees from Eritrea and the Ogaden area living in Djibouti at one time late in 1977. Cross-border migration is difficult to control due to the rugged terrain. Nevertheless Djibouti has remained relatively free from major smallpox epidemics. Five main epidemics have occurred in the past 25 years. The numbers of cases and deaths occurring in these epidemics are shown in Table 1. No smallpox case has been reported in Djibouti since April 1974.

TABLE 1 SMALLPOX CASES AND DEATHS, 1959 - 1974

Year	Cases	Deaths	Main area(s) affected
1959	110	13	Djibouti town, Hol-Hol, Chebelley
1966	52	6	Dikhil
1971 - 1972	104 ^a	3	Djibouti town, Daodaouya, Adueno
1973	14 ^b	0	Different regions
1974	12 ^a	0	Djibouti town

^a Original source of infection thought to be Ethiopia.

^b During 9 months; 10 importations from Ethiopia, 4 locally acquired infections.

The issue of this document does not constitute formal publication. It should not be reviewed, abstracted or quoted without the agreement of the World Health Organization. Authors alone are responsible for views expressed in signed articles.

Ce document ne constitue pas une publication. Il ne doit faire l'objet d'aucun compte rendu ou résumé ni d'aucune citation sans l'autorisation de l'Organisation Mondiale de la Santé. Les opinions exprimées dans les articles signés n'engagent que leurs auteurs.

2.2 Surveillance

Smallpox surveillance in Djibouti prior to November 1977 is summed up by the following quotation:

"...smallpox surveillance in the Republic of Djibouti was a passive surveillance based on the trust the inhabitants of this country have in us; they are in the habit of coming to the nearest dispensary or of asking for admittance to the hospital at the slightest sign of a health problem.

"As far as fevers with rashes are concerned, the itinerant consultations carried out by vehicle or by helicopter - according to the type of terrain are referred back to us.

"We are convinced that as far as Djibouti is concerned, this method of passive surveillance has been an efficient method in the past which has allowed us to isolate those affected by smallpox very rapidly and to make use of the classical containment procedures." *

Surveillance activities since that time are reviewed below.

2.3 Vaccination

The vaccination policy has been to conduct a nationwide vaccination campaign every three years. Vaccination figures for the past five campaigns are shown in Table 2.

TABLE 2 SMALLPOX VACCINATION PERFORMED
IN THREE YEARLY VACCINATION CAMPAIGNS 1966 - 1977

Year	Vaccinations Performed
1966	114 853
1969	109 000
1971	101 385
1974	118 923
1977 ^a	126 282

^a Excluding Tadjourah and Obock Cercles.

Further details on the vaccination campaigns are included in document WHO/SE/78.100.

Assessment of vaccination coverage in December 1977 and June 1978 showed a high overall coverage of around 95%. Predictably, the coverage among children less than one year old was somewhat less.

* Dr. Abieh Warsama, Director of Public Health, Djibouti, at the Nairobi Smallpox Surveillance Coordination Meeting, April 1978 .

3. Review of WHO Involvement in the Past 12 Months

November - December 1977: Dr. Nicole Grasset, WHO Consultant, made a six week visit during which the past epidemiology and control measures of smallpox and the existing surveillance system were reviewed. Active surveillance was commenced in November 1977 and maintained through December. Detailed recommendations were made for its continuance and improvement. A full report of the visit findings and activities is given in document WHO/SE/78.100.

June 1978: Dr. Pierre Claquin, WHO Consultant, made an 8 day visit to participate in and review surveillance activities. It was found that, in 1978, house to house searches had been conducted in January (4 "cercles" and Djibouti town) and in March and April (in Cercles Dikhil and Ali Sabieh and Djibouti town). Apparently the northern "cercles" of Tadjourah and Obock had not been searched in the first half of 1978. No serious assessment of any of the 1978 search activities had been conducted. Between house to house searches no active surveillance was being conducted except in the refugee camps and no adequate national reporting system existed despite the many forms which had been printed for that purpose. It was clear that the recommendations made by the previous consultant had not been fully implemented and further recommendations were made concerning the future surveillance and also for the provision of material assistance.

October 1978: Dr. Jean-Paul Ryst, WHO Consultant, commenced a four-month assignment in Djibouti to organize and coordinate surveillance activities. The plan of action and current status are summarized below.

4. Current Activities

4.1 Plan of Action

The main points of the plan of action drawn up in October 1978 were:

- to reactivate the weekly reporting system particularly that covering the nomadic population through the "Groupe de surveillance Nomade",
- to organize a house to house search for smallpox suspects in the rural areas,
- to conduct a facial pockmark survey among the 0 - 19 year age group in priority areas (refugee camps, schools in Djibouti town, locations of the last smallpox outbreaks of 1973 and 1974),
- to publicize the 100 000 Djibouti francs reward, and
- to assess the results of the surveillance activities.

Staff, budget and transport requirements were planned accordingly and a proposed calendar of events for October to December 1978 prepared. It was mentioned that the main problem area was in the northern "cercles" where it was possible that movement may be restricted.

4.2 Progress

a) Reporting system The number of cases of chickenpox notified in 1978 are shown in Table 3.

TABLE 3 REPORTED CHICKENPOX CASES AND DEATHS, 1978

Cercle	Cases	Deaths
Djibouti	51	0
Dikhil	13	0
Tadjourah	10	0
Obock	0	0
Ali Sabieh	1	0
TOTAL	75	0

These cases are primarily recorded in hospital and dispensary attendance records and weekly reports are sent to the Directorate of Health. A consolidated monthly report is sent to the Hygiene and Epidemiology Service and WHO. Rumour registers supplied for smallpox and rash-with-fever surveillance are not being utilized.

b) Sources of Information The 80 officers of the Hygiene and Epidemiology Service have been made aware of their potential as sources of information. Nevertheless little is forthcoming from them. Dispensaries and schools have been officially instructed to notify the Directorate of Health of all eruptive diseases. The country's six hospitals and 17 dispensaries are regularly visited by the epidemiologist and constitute the main source of information (Figure 1).

The "Groupement Nomade" have failed to maintain the weekly reporting system, introduced in November 1977, beyond March 1978. Attempts at reactivation have not been very successful despite a circular from the central command. The G.N. posts are visited as part of the rural surveillance activities.

Customary-law chiefs and village chiefs have been contacted to enlist their support and in Ali Sabieh Cercle 44 influential persons attended a meeting seeking their cooperation in the search activities. All public and koranic schools will be visited by searchers (Figure 2).

c) The reward, previously 5 000 Djibouti francs has been raised to 100 000 DF (the value of an adult camel). Publicity is being achieved through press, radio, TV, posters and loudspeaker announcements.

d) Active House to House Searches (figure 3) Searches have been completed in the two southern "cercles" and a search is in progress in Djibouti District's rural areas, the caravanserai and Boulaous refugee area of Djibouti town. The two northern "cercles" will be searched between 15 November and 15 December although some transportation problems are expected. The results of the search assessment in Dikhil and Ali Sabieh Cercles are summarized in Table 4.

TABLE 4 SUMMARY OF SEARCH RESULTS, SOUTHERN CERCLES, OCTOBER 1978

Cercle	Number of houses visited	Assessment		
		Number of persons questioned	Percentage who had seen recognition card	Percentage who knew about reward
Ali Sabieh	2 585	urban: 50 nomadic: 205	80 38	50 19
Dikhil	2 350	190	51	36
TOTAL	4 935	445	53	31

e) Pockmark Survey The survey has been planned for refugee camps and schools of Djibouti town.

f) Laboratory Specimen Collection Instructions have been given on collection and dispatch of specimens and kits have been distributed. A reward of 1 000 DF is offered for any positive specimen. A total of 48 specimens have been collected from January to November 1978 (Annex 1).

g) Conclusion The WHO consultant presently coordinating the surveillance activities feels that "the operations in progress should be sufficient to prove the absence of smallpox from the territory of the Republic".*

* Dr. Jean-Paul Ryst, in Status Report of 8 November 1978.

FIGURE 1: MAP SHOWING CERCLES, "GROUPEMENT NOMADE" POSTS, HOSPITALS AND DISPENSARIES

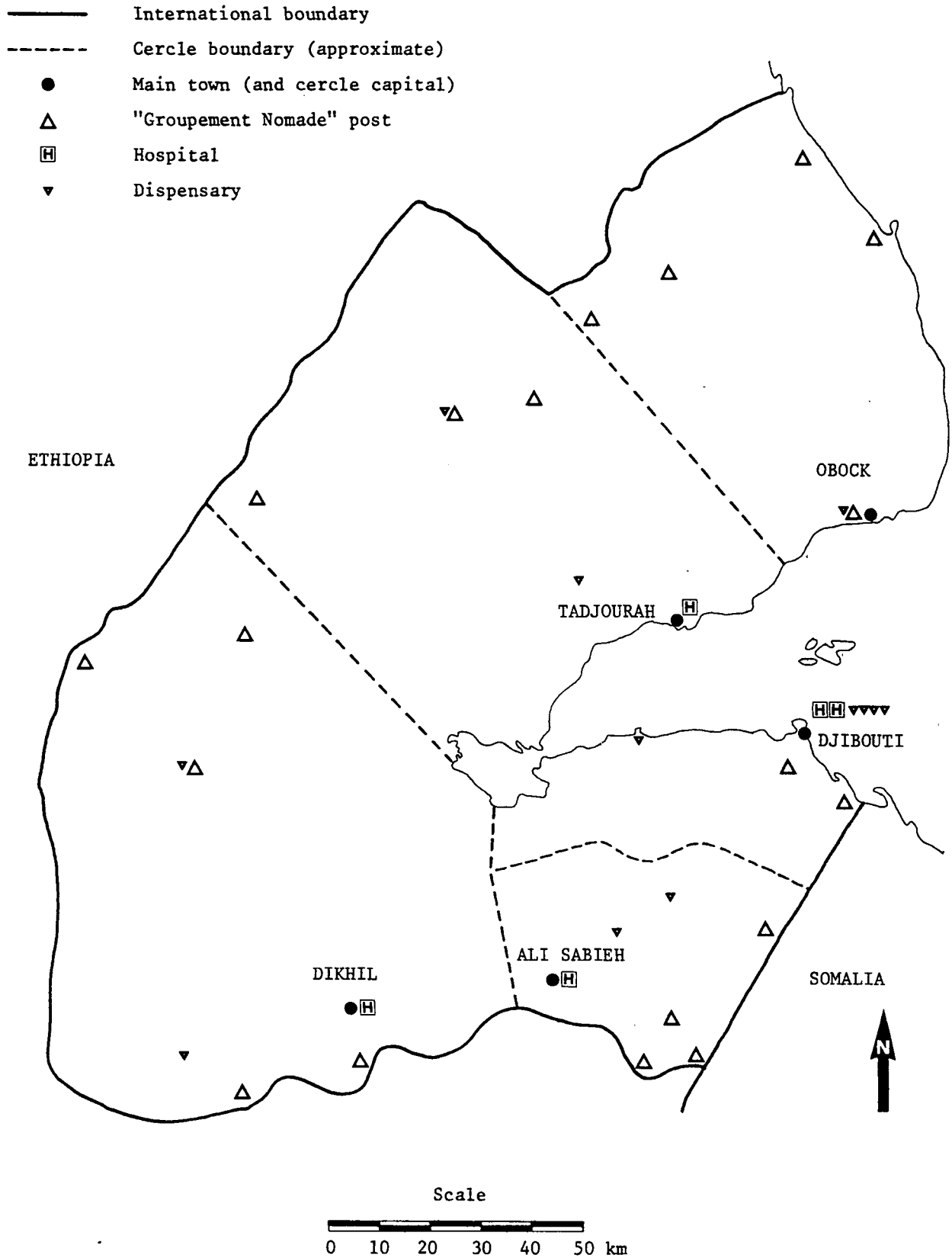
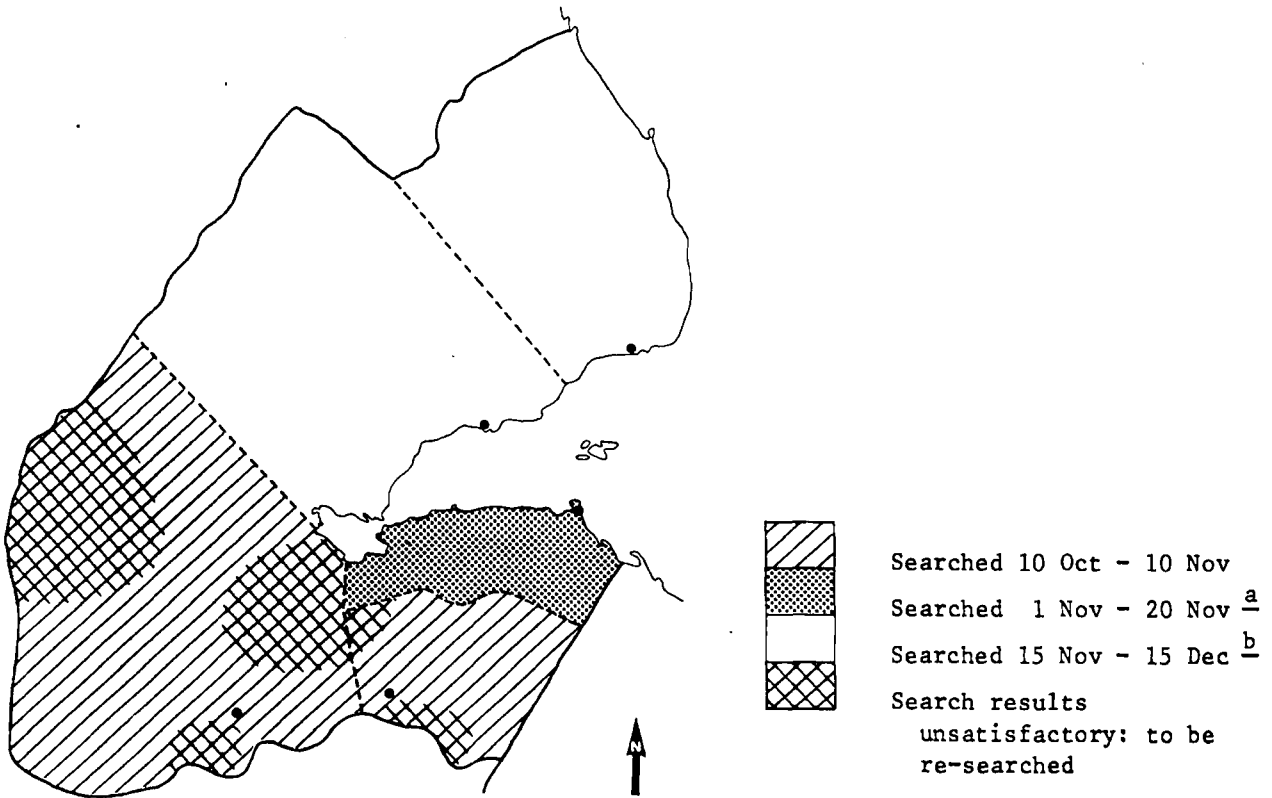


FIGURE 2: LOCATION OF PUBLIC SCHOOLS



FIGURE 3: HOUSE TO HOUSE SEARCH COVERAGE 10 OCT - 15 DEC 1978



^a Results not yet available.

^b Search scheduled.

Annex 1

LABORATORY SPECIMENS FROM DJIBOUTI TESTED BY WHO
COLLABORATING CENTRES ^a 1 JANUARY - 23 NOVEMBER, 1978

Month	Number of specimens	Results - Number of specimens positive for: ^b	
		Variola	Herpes Varicella
January	7	0	5
February	9	0	4
March	4	0	2
April	2	0	1
May	6	0	2
June	3	0	1
July	5	0	2
August	4	0	1
September	3	0	0
October	0	0	0
November	5	0	1
TOTAL	48	0	19

^a All specimens tested at: Viral Exanthems Branch, Center for Disease Control, Atlanta, USA or Research Institute for Viral Preparations, Moscow, USSR.

^b No virus was identified in all other specimens.