



PLAN OF ACTION FOR THE SMALLPOX ERADICATION PROGRAMME
IN SOMALIA 1978/1979

1. Introduction

In Somalia, smallpox incidence declined sharply from July 1977 to 26 October 1977 when the last active case was found. During September and October low level transmission persisted in small nomadic groups in remote areas. From October to December, heavy rains restricted search efforts so, in spite of no new cases detected since 26 October, intensive search is necessary to verify that the programme has reached its goal of interrupting smallpox transmission.

The Somali Ministry of Health has accepted the responsibility of maintaining full-scale smallpox surveillance until final international certification of smallpox eradication with the assistance of the World Health Organization.

2. Objective of the programme

Two years of active and continuous smallpox surveillance should elapse from the date of onset of the last smallpox case in a given territory to the date of declaration of smallpox eradication by an independent international commission. It is therefore considered essential that the activities of the smallpox eradication programme in Somalia should:

2.1 Establish a sensitive ongoing rash disease surveillance system for detection and diagnosis in each district with regular weekly reporting to regional and national levels.

2.2 Develop and maintain the proper documentation and record-keeping which will permit evaluation of:

- the sensitivity of active search operations;
- proper investigation of reported suspect smallpox cases;
- rapid and effective containment of any suspected smallpox outbreak(s) detected.

3. Brief review of technical and operational aspects

3.1 Search and surveillance activities

Given the limited resources of manpower, transport and funds it is not feasible to maintain full-scale surveillance activities in all areas at all times. Therefore, the development of suitable regional and district surveillance plans will be encouraged. This will require individual approaches and a full understanding of the epidemiological situation, resources, and facilities available. While all areas of the country must be kept under ongoing surveillance, the frequency and the intensity of search operations will vary in proportion to the probable risk of importation or risk of hidden local foci. Intensive and frequent surveillance will be targeted especially on high-risk groups and high-risk localities. Techniques used will vary with specific areas and with the character of the population to be searched. As in 1977, there are several important surveillance techniques which will continue throughout the two-year surveillance period.

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(a) Periodic active search operations

It is projected that systematic active searches covering the whole territory of Somalia will be carried out four times in the north and six times in the south in 1978 and four times in 1979 in both. In each district/municipality teams of temporarily hired searchers, supervised by surveillance agents, will undertake house-to-house searches in all villages, hamlets, nomadic camps and will visit each school, waterpoint, market, tea-shop, administrative office and health establishment in a systematic manner according to an established schedule. All suspect cases will be investigated on the spot by district team leaders, diagnosis established and samples collected.

(b) Surveillance during intersearch period

District team leaders with their surveillance agents and the regional surveillance teams will maintain a continuous surveillance system including:

special searches in vulnerable areas

- nomadic and remote areas that may have been missed during the regular search operation;
- border areas and areas which were cut off by seasonal rains;
- areas recently affected by smallpox;
- previously unsearched or not properly searched areas;
- areas where for any reason, staff have been absent or for which no one has taken responsibility;

special waterpoint and market searches will be introduced;

an effective secondary surveillance system covering the whole assigned area will be established by encouraging village nabadoons, party workers, police, school teachers and members of Somali Youth's Organization, Somali Worker's Organization, Somali Women's Organization, and Red Crescent Organization to collect and report information about suspect smallpox cases or fever and rash cases.

All rash and fever cases detected will be entered into Smallpox Rumour Registers and immediately investigated by district team leaders or regional surveillance teams.

3.2 Containment activities

- (a) Every outbreak of smallpox or suspected smallpox will be treated as a public health emergency. Containment measures will be promptly instituted whenever a suspected smallpox case is reported.
- (b) All such cases will be fully investigated, particularly the source of infection and movement of contacts.
- (c) Cross-notification and outbreak notification will be immediately dispatched by cable or messenger.
- (d) All persons living in an affected locality will be vaccinated regardless of previous vaccination, health, nutritional status or age.
- (e) Vaccinators will remain in an affected locality for at least three weeks after the onset of the rash of the last case.
- (f) The patient(s) will be isolated as soon as possible.
- (g) Patients will be isolated within the affected locality and paid five shillings for each day spent in isolation until all scabs have fallen off.
- (h) Watch-guards should be posted at every isolation unit.

(i) A special house-to-house search for fever and rash cases will be carried out in a 10 km radius of an affected locality followed by vaccination.

(j) Daily follow-up visits will be undertaken by supervisory staff until six weeks have elapsed since onset of rash of the last case.

3.3 Specimen collection for laboratory examination

At present it is very important to confirm the diagnosis of every suspected case by laboratory tests. For proper collection of specimens the Zeropox Office in Mogadishu will provide special specimen collection kits. Specimens should be collected from:

- every newly reported smallpox outbreak (all cases) or suspect cases;
- people who are ill following close contact with persons who have died from suspect chickenpox;
- fever and rash cases which cause difficulty in diagnosis;
- chickenpox cases when rash is found on the soles or palms;
- chickenpox cases where extensive rash is present over all the body;
- cases with suspected postvaccinal complications.

All specimens collected in the field should be transferred to Zeropox Mogadishu as soon as possible and forwarded to Geneva headquarters.

3.4 Reporting, record-keeping and documentation

A basic network of units reporting every week will be established:

- basic reporting units including the district team leader in each district;
- regional level: Regional Zeropox Office (regional epidemiologist);
- central level: Zeropox Office, Mogadishu.

Health offices in big municipalities and hospitals should be included.

(a) Weekly epidemic report

Fever and rash cases collected during any given week will be summarized and sent to the Regional Zeropox Office every Thursday by each district team leader. The Regional Zeropox Office will transmit the district weekly epidemic reports together with the regional summary report to the Zeropox Office in Mogadishu by no later than Sunday.

(b) Reporting of surveillance activities

Search summary results and search assessment results should be sent by district team leaders to the regional level not later than three days after the last day of search. The regional epidemiologist will compile district reports and submit them to Mogadishu not later than seven days after the last day of the search.

Details of all fever and rash cases and other rumours will be maintained in smallpox rumour registers by the district team leader and regional office clerk. All activities performed at each level should be fully documented and put together in a comprehensive report for presentation to the International Assessment Commission.

3.5 Incentives and rewards

(a) Rewards for reporting smallpox outbreaks

The reward of 200 So.Sh. for reporting a previously unknown smallpox outbreak will be given to the following individuals:

a member of the general public reporting the smallpox outbreak;
 a local health worker (searcher, vaccinator, etc.) to whom this information is given and who notifies senior supervisory staff.

Payment is subject to laboratory confirmation.

(b) Reward for reporting a chickenpox outbreak

At the discretion of the regional epidemiologist in consultation with the WHO adviser/epidemiologist a reward of 5 So.Sh. may be given to a surveillance agent for each chickenpox outbreak with active cases reported.

3.6 Publicity for reward and other programme activities

The most effective form of publicity is by word of mouth originating with the searchers themselves. A variety of methods may be used:

writing an announcement about the reward on walls (where permitted);
 exhibition of reward posters in villages, schools, offices, hospitals;
 the pasting of placards on public health vehicles;
 the exhibition of special banners and signboards during fairs and festivals;
 publications in the press or announcements on the radio;
 projection of slides in cinemas;
 payment of reward in public.

4. Organizational structure and NSEP personnel

The operational NSEP staff required for fulfillment of the given plan of action shall be organized at three levels:

- (a) field staff, surveillance agents and their team leaders in each district;
- (b) supervisory staff at each region;
- (c) staff for technical expertise, policy-making and coordination of work at the central level.

4.1 District NSEP staff

The NSEP unit at district level forms the basic infrastructure of the smallpox eradication programme and the district team leader is its backbone. This unit will establish and maintain an efficient system of active surveillance.

Each district shall therefore be provided with:

district team leader	1
resident surveillance agents	3-20
temporary searchers	3-5 per surveillance agent for search period

These numbers may vary according to the epidemiological importance and size of the given districts within regional staff quotas.

Resident surveillance agents and temporary searchers shall be deployed by the district team leader in consultation with regional supervisory staff. The team leader, surveillance agents and temporary searchers should be locally recruited and paid daily wages. District team leaders and surveillance agents will be recruited on a long-term basis. Preference will

be given to those working effectively for the programme in 1977. Each district team leader will require access to a vehicle for rumour investigation.

4.2 Regional NSEP staff

Regional NSEP teams are the key to ensuring effective programme implementation and supervision in accordance with the strategy and operational methodology established by the Somali Government and WHO.

Each region shall be provided with:

(a)	regional epidemiologist (national counterpart)	1
(b)	WHO adviser/epidemiologist (full or part time only)	1
(c)	office clerk/administrative assistant	1
(d)	team leader	1
(e)	surveillance agents	2-4
(f)	drivers	1-2
(g)	service workers (watchman/cleaner)	1

The inclusion of the regional medical officer as a part of the regional supervisory team is essential.

Office clerk, team leader, surveillance agents and drivers shall be deployed by the regional epidemiologist in consultation with the WHO adviser and the regional medical officer. The regional epidemiologist shall be a regular employee of the Ministry of Health.

The office clerk, team leader and surveillance agents should be locally recruited on a long-term basis with daily wages. Drivers should be regular employees of the Ministry of Health or Ministry of Transport or exceptionally hired locally with the permission of the Ministry of Health.

In each region a special Zeropox Office will be established and maintained where reports, records and documentation may be kept and equipment and supplies stored. If an office is not available through the Government, one may be rented on a monthly basis.

A minimum of one (northern regions) to two (southern regions) field vehicles will be allotted to each region with the aim of also establishing several mobile regional surveillance teams. The teams should consist of:

(a)	first regional surveillance team:	regional epidemiologist 2 surveillance agents driver
(b)	second regional surveillance team:	team leader 2 surveillance agents driver

These mobile regional surveillance teams, apart from organizational, supervisory and assessment responsibilities, will be widely used for verification of diagnosis of suspected cases and as teams for rapid containment of suspect foci.

One vehicle, driver and interpreter will be assigned to each WHO adviser/epidemiologist.

Mogadishu city shall be considered as a separate region with a special staffing pattern.

4.3 Central NSEP headquarters staff

The Mogadishu headquarters staff is responsible for development and implementation of the strategy to ensure smallpox eradication throughout Somalia and requires:

(a) technical unit

national epidemiologists (project manager, director, vice-director);
 WHO epidemiologists (team leader, coordinator)
 statistician and administrative assistant

(b) administrative unit

administrative officer (WHO)	1
supply officer (WHO)	1
transport officer (WHO)	1
finance officer (WHO)	1
clerks/typists	2
store-keeper	1
transport/supply assistants	2
watchmen, cleaner	5
drivers/mechanics	6-7

A minimum of three vehicles will be allotted for the technical unit and the same number for the administrative unit.

4.4 Training and briefing of NSEP personnel

As a prerequisite for ensuring the success of programme training/briefing of all NSEP personnel at all levels is necessary:

- to give technical information;
- to identify personal skills (right person for right job in right place);
- to raise the level of motivation.

(a) International and national epidemiologists

They should be trained at the beginning of their assignment regardless of previous experience. In general, briefing of the epidemiologist will require two/three days in national headquarters and a further two/three days of field orientation. Briefing should also include administrative, transport and financial matters. The outline for technical briefing should be flexible and changed according to current needs. Progress review meetings at national headquarters, monthly meetings in the regional offices and presearch meetings in districts and towns should be viewed as part of the training and retraining process.

(b) Training and briefing of regional and district staff

At the regional offices, trainees will be instructed how to make differential diagnosis; organize, conduct and supervise active search in the area of their responsibility; and organize and conduct containment measures whenever required. They should understand forms and documentation required. In addition to this they should prove their capability in administrative matters such as reporting, maintenance of vehicles, financing, documentation, etc.

(c) Training and briefing of temporary searchers

At the district level during presearch meetings at the beginning of recruitment, four to five hours of training should demonstrate correct techniques for proper record-keeping. Vaccination by bifurcated needles must be demonstrated and practised.

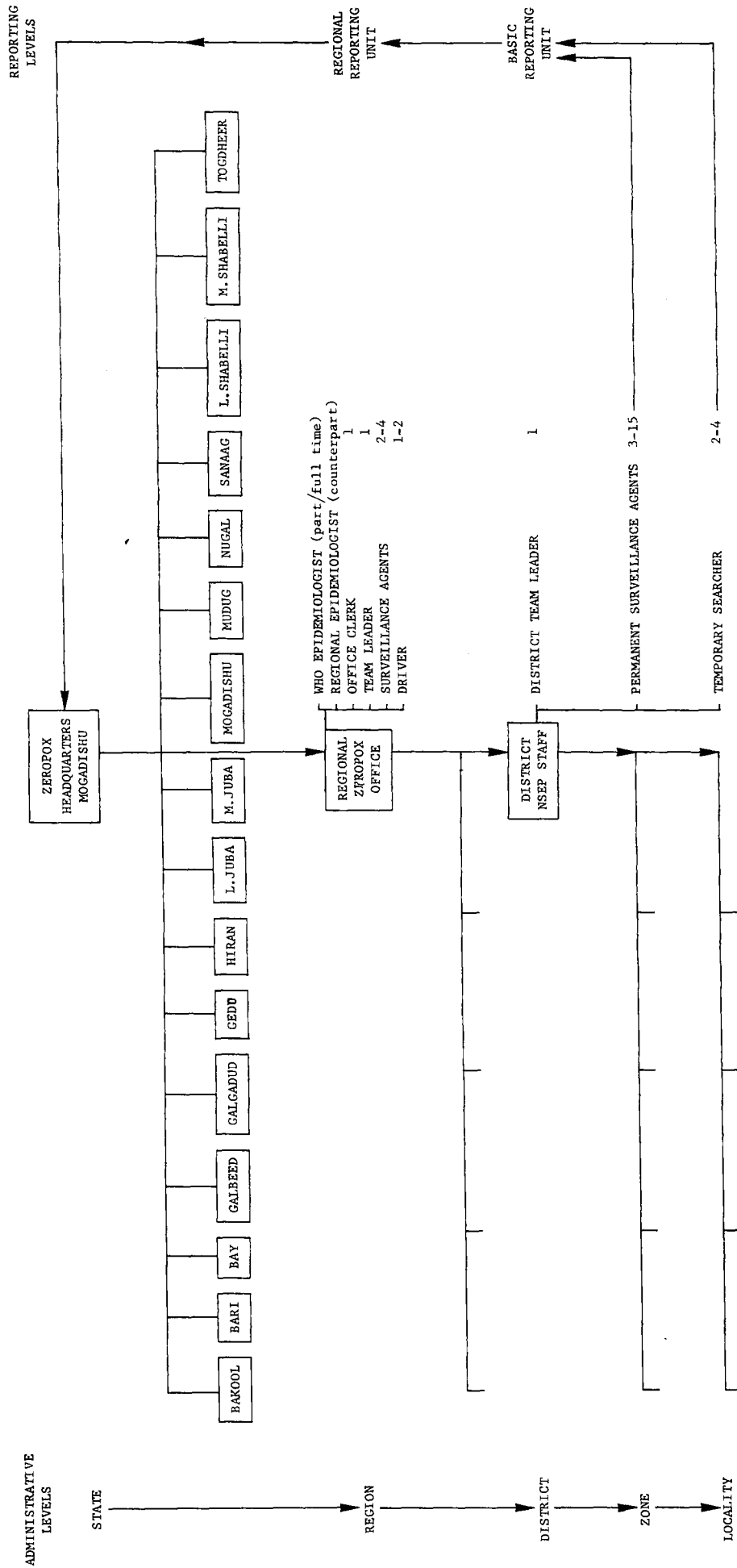
(d) Ad hoc training sessions

These should be organized whenever particular problems arise. Training and retraining sessions should be used as a way of combatting any lack of interest in the programme and to maintain the quality of work at a high standard.

4.5 Progress review meetings

Monthly or bi-monthly (every two months) progress review meetings will be held in the Ministry of Health with the participation of regional epidemiologists, WHO advisers, national NSEP headquarters staff, and appropriate Government officials. Similarly, monthly meetings will be organized for district team leaders and regional NSEP staff at the regional level. The district team leader will hold meetings with his staff on a weekly basis, primarily for weekly reporting of fever and rash cases detected in a given week.

ORGANIZATIONAL STRUCTURE OF NSEP STAFF SOMALIA 1978-1979



NSEP STAFF PROJECTIONS BY REGION - SOMALIA, 1978-1979

Region	Regional NSEP staff										District NSEP staff				Reg. total during	
	WHO epidemiologist	Regional epidemiologist	Office clerk	Team leader	Surveillance agent	Driver	Watchman/cleaner	Total	Team leader	Surveillance agents	Temporary searcher	Intersearch period	Search period			
Bakoal	1.0	1	1	1	4	2	1	11	5	50	120	66	186			
Bari	0.3	1	1	1	2	1	1	7	6	20	35	33	68			
Bay	1.0	1	1	1	4	2	1	11	4	50	200	65	265			
W. Galbeed	0.5	1	1	1	2	1	1	7	6	25	35	38	73			
Galgadud	0.5	1	1	1	2	1	1	7	4	15	30	26	56			
Gedo	1.0	1	1	1	4	2	1	11	6	50	120	67	187			
Hiran	0.5	1	1	1	4	2	1	10	3	20	66	33	93			
L. Juba	0.5	1	1	1	4	2	1	10	4	20	50	34	84			
Mid. Juba	0.5	1	1	1	4	2	1	10	4	30	60	44	104			
Mogadishu	0.5	1	1	1	4	2	1	10	4	30	60	44	104			
Mudug	0.5	1	1	1	2	1	1	7	4	15	35	26	61			
Nugal	0.3	1	1	1	2	1	1	7	4	15	35	26	61			
Sanaag	0.3	1	1	1	2	1	1	7	3	10	30	20	50			
L. Shabelli	0.5	1	1	1	4	2	1	10	7	50	200	67	267			
Mid. Shabelli	0.5	1	1	1	4	2	1	10	4	30	80	44	124			
Togdheer	0.5	1	1	1	2	1	1	7	4	15	30	26	56			
Mogadishu headquarters	2.0	3	11	-	-	11 + 6	5	37								
Total	11.0	19	27	16	50	42	20	185	72	445	1 180	659	1 839			

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