

THE VALUE OF SURVEILLANCE NEWS LETTERS

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Surveillance is an integral part of an eradication programme, as the term eradication signifies that the number of indigenous cases of smallpox is zero. The surveillance system identifies and quantitates the existing disease problem and is essential to the planning and launching of a mass campaign. It identifies cases of disease within the population by age, sex, time and place. Surveillance data often permit factors influencing the transmission of disease to be identified and this, in turn, assists the implementation of effective control measures. Surveillance is essential to monitor the effectiveness of the eradication campaign and to identify importations so that eradication, once achieved, can be maintained.

Dissemination of surveillance data is an essential part of this system. This distribution of data has the following purposes:

1. It assures the reporting sites that their reports are looked at and are being used. This in itself is a positive stimulus to improved reporting.
2. It identifies disease problems both quantitatively and geographically so as to alert local health authorities of present or potential epidemic situations.
3. Through special reports, (which might be included in a Surveillance News Letter), examples may be presented of different types of investigation and control procedures which may assist local health authorities in improving their own methods of case investigation and control.
4. In an eradication campaign, a news letter keeps local health authorities informed of the planning, progress, and problems in the mass campaign. Such information maintains local interest and continually reminds local authorities of their specific responsibilities to ensure the success of the eradication campaign.

The Federal Headquarters should be responsible for a news letter which emphasizes the importance of surveillance in the control of diseases, especially communicable diseases. The news letter should show clearly the source of the reports and the routine collected data, including the age group, sex, location, number of cases and deaths, and the vaccination status of the area. Information based on the clinical diagnosis of disease should be accepted, although this may be modified at a later date on receipt of a laboratory diagnosis. The news letter should indicate clearly the total of the routinely reported cases, special field investigations, survey reports and relevant research information. The control measures and other operational procedures used in the country should be briefly mentioned. It should contain interpreted information that will show the disease situation in the country, and should be widely distributed within and outside the country.

The Nigerian Smallpox Measles Programme has experience with distribution of surveillance data in several forms:

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1. The Weekly Epidemiological Bulletin is an official ministry document tabulating disease reports as received. It is not a true news letter in that there is no narration or interpretation. Such a report is used to fulfill international requirements on disease reporting.
2. The Epidemiological Unit has prepared periodic, but quite lengthy, surveillance reports on the progress of smallpox measles campaign. These reports are very useful but the time for preparation and distribution is such that there is a 4-6 weeks delay in getting current data to the field. This delay in circulating current disease information lessens its effectiveness.
3. The Nigerian Programme is currently experimenting with a one page weekly Surveillance Bulletin (Annex 1) which is intended to provide disease information and interpretation on a current basis. Inclusion of such sheets with the Weekly Epidemiological Bulletin would solve many of the logistic problems of distribution.
4. In addition, the various Area Programmes in Nigeria have also used local surveillance news letters to provide local programme data.

In summary, the surveillance news letter serves as an integral part of disease surveillance by providing field personnel with current data; it improves coordination of control activities and stimulates reporting, investigation and control at the local level, which are essential to the achievement of disease eradication.

References

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2. Manual of Operation, West African Smallpox Measles Programme, National Communicable Disease Center.
3. Papers for discussion at the 18th WHO Regional Committee for Africa, September 1968.

GOVERNMENT OF NIGERIA
FEDERAL MINISTRY OF HEALTH, EPIDEMIOLOGICAL UNIT

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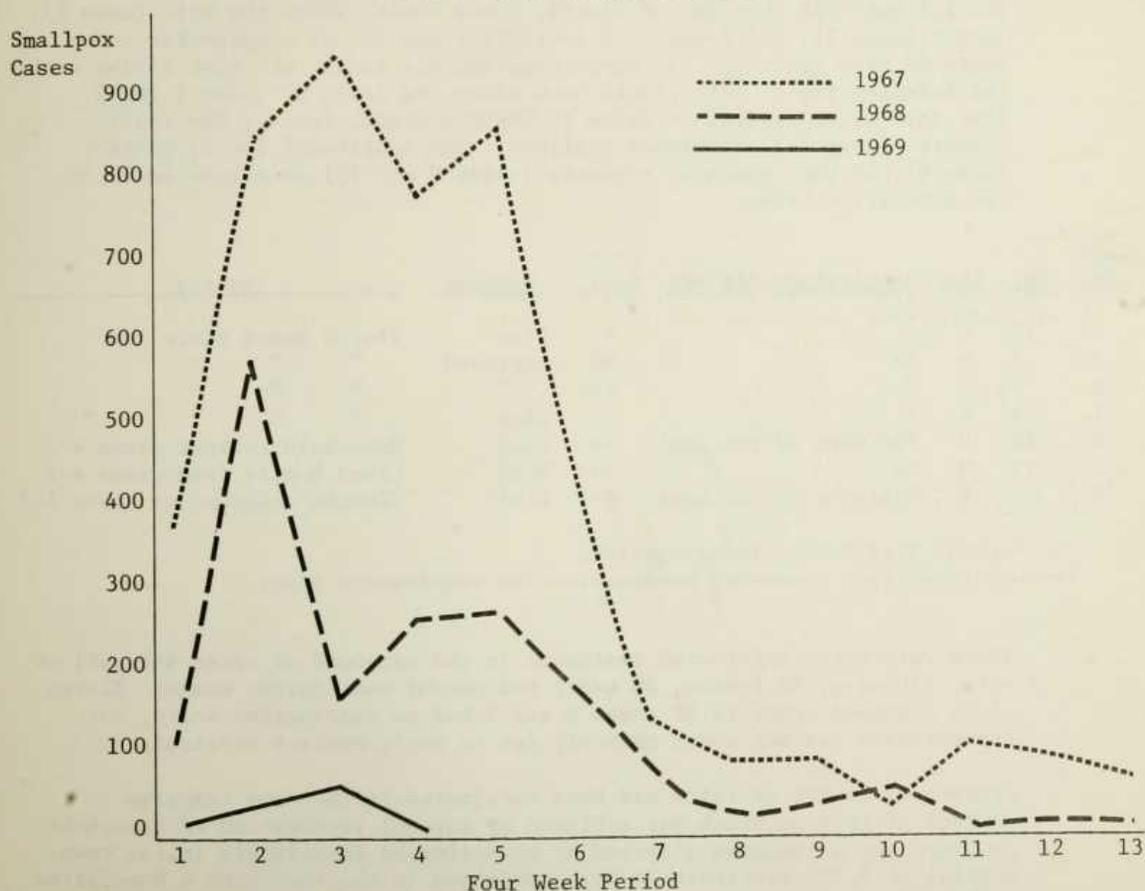
I. SMALLPOX

A. Official Reports

Only five cases of smallpox were reported during April. This low number of cases at the height of the epidemic season indicates great progress in the eradication programme. Graph I presents smallpox in 1969 as compared to 1967 and 1968.

SMALLPOX CASES REPORTED IN NIGERIA 1967-1969

CASES PER FOUR WEEK PERIODS



B. Outbreaks under Investigation

Smallpox is currently under investigation in Kafanchan, North Central State, and Numan, North Eastern State. The Kafanchan case was reportedly imported from Makurdi, Benue Plateau State. With the number of smallpox outbreaks decreasing, early and complete investigation of each case is mandatory.

Cross notification on imported cases is essential to the achievement of eradication.

C. Areas of Concern

The achievement of eradication requires a continuing vigilance especially in high risk areas. High risk areas consists of areas which have reported smallpox in the last sixty days and unvaccinated areas and include:

- Kwara State - Ilorin
- North Central State - Zaria Province especially Kafanchan Area
- Benue Plateau - especially Makurdi
- North East - Combe - Numan Area

D. Completed Investigation

The following investigation from the Western State emphasizes interstate transmission and is an example of effective investigation and control. The initial outbreak occurred in Ilorin, Kwara State, where the wife (case 1), mother (case 2), and 3-year old daughter (case 3), of a carpenter were infected with smallpox. An apprentice and his family who were living with the infected family left Ilorin soon after the death of cases 1 and 2. Five days after arrival in Ikire in Western State, four of the family members (cases 4-7) developed smallpox. One additional family contact (case 8) and two community contacts (cases 9 and 10) developed smallpox one generation later.

Case No.	Age	Sex	Vaccination	History	Vacc. Scar	Outcome	Source
4	18	M	+		+	Died	Ilorin Kwara State
5	5	M	No		No	Survived	" " "
6	3½	F	No		No	"	" " "
7	3	F	+		+	Died	" " "
8	50	M	Yes	(Over 20 yrs ago)	++	Died	Household contact cases 4-7
9	45	M	No		++	Died	Lived ½ mile from cases 4-7
10	65	F	Yes	(over 20 yrs ago)	++	Died	Visited compound of cases 4-7

- + Patient died before investigation.
- ++ Confluent rash prevented examination for vaccination scar.

There were three uninfected residents in the compound of cases 4-8, all of whom, (19 male, 48 female, 20 male) had recent vaccination scars. Eleven of 26 compound contacts of cases 6 and 7 had no vaccination scars, but transmission did not occur probably due to early contact vaccination.

Approximately 85% of Ikire had been vaccinated in the mass campaign. Control of this outbreak was achieved by careful vaccination of household contacts and a campaign directed at unvaccinated individuals in the town. A total of 7,775 vaccinations were performed in the town with a population of 50,000.

This outbreak emphasizes the fact that smallpox is acquired through close contact. Five of the seven cases in Ikire acquired their disease from an infected compound contact. This emphasizes the importance of vaccinating every compound contact of an infected case. The mortality in this outbreak 70% is unusually high for smallpox in Nigeria and raises suspicion of unidentified cases.

E. Laboratory Investigations

With the number of outbreaks approaching zero, laboratory specimens should be obtained from every outbreak. The Federal Ministry of Health Diagnostic Laboratory has proved conclusively that some outbreaks thought to be small-pox were caused by agents from the Herpes Varicella (Chickenpox) group. Studies currently in use included agar gel diffusion, egg isolation, and electron microscopic examination from scab material. Each specimen submitted should include 10-20 scabs and a report of the case history and examination.

II. MASS CAMPAIGN

Teams are currently active in the Ilorin area of Kwara State; Adamawa and Sardauna Provinces of North East State, and the three Eastern States. Maintenance programmes are underway in Kano, Midwest, Western, and Lagos States.