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MAINTENANCE OF SMALLPOX IMMUNITY AMONG THE NOMADS

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INTRODUCTION

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The nomadic population of the Republic of Niger amounts to about 530,000 inhabitants belonging to various tribes, of which the most important are the Peulhs, the Touaregs, the Bororos, the Bellas, the Arabs and the Toubous. These nomads live mainly in the Sahel-Sahara region of the Republic, but they may be found everywhere throughout the region occupied by the settled population. At the present time, the government policy is to encourage them to settle down, and the establishment of new cities, thanks to the discovery of large deposits of uranium in Niger, will be of great assistance in this.

For disease surveillance and to improve the health of the nomadic population the Government of the Republic of Niger uses two types of medical services:

- 1. the fixed medical services, constituted by the dispensaries;
- 2. the mobile medical services, constituted by the Mobile Teams for Hygiene and Mobile Medical Care, and by the OMNES (the Niger Organization for Mobile Medical Care and Health Education). These mobile medical services are employed wherever necessary to provide protection to the population, whether nomadic or settled, against present or threatened outbreaks of the communicable diseases.

In spite of the mobility of these teams and the efforts which have been made, it has been difficult to vaccinate the desired goal of 90% of the nomad population as the nomads are, of course, perpetually moving about. New solutions to the problem are necessary.

The difficulties are chiefly of two kinds:

1. Transportation

The terrain is difficult at all times of the year. As there are virtually no roads in the region inhabited by the nomads, it is necessary to follow the roughest of tracks from tribe to tribe in order to carry out vaccination.

2. Dispersion of the Population

The majority of the nomads are absent from their territory during the dry season, a period in which it is easiest for our teams to move about.

The nomads disperse in search of pasture and of food during this difficult time. The tents are often hidden among the dunes and they cannot be seen without an experienced guide. Fortunately, up to 150,000 of the 530,000 gather together at In-Gall for the salt cure in July, August and September of each year and, during the attack period of 1967 - 1969, 379,000 nomads were vaccinated in their own territory (In-Gall Tchin-tabaraden, Abalak) at pools and wells, and especially at water sources, where our teams stopped to wait for them.

THE NECESSITY OF MAINTAINING THE LEVEL OF IMMUNITY AMONG NOMADS

It is absolutely necessary to maintain the level of immunity at all times in the nomad regions, since the nomad can serve both as a reservoir and transmitter of

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smallpox over long distances. Not infrequently, the nomad leaves his native region and contracts the disease in another area; as soon as the first symptoms appear, he quickly returns home, where he infects the other nomads. In addition to transmitting smallpox all along his route home, his family and other members of his tribe or group sometimes inoculate themselves from his pustules. Due to the remoteness of the region inhabited by the nomads, there is also very frequently a prolonged delay in the notification of cases.

In view of the difficulties which may be encountered at all times and particularly during the hot season, techniques for the execution of maintenance programmes require detailed investigation before being undertaken.

The problem is a very difficult one, but not insoluble. It is necessary, not only to carry out vaccination in the region inhabited by the nomads, but also to vaccinate every nomad wherever he may be found unless he possesses a vaccination card issued less than three years previously. This measure must be applied to all those moving from one place to another: travellers, merchants, foreigners, peddlers and shepherds. Experience has shown in Niger that this approach has had the result that, since September 1967, no case of smallpox has been notified from the region inhabited by the nomads, whereas previously 45% of cases were from this region (Filingué, Tahoua, N'Guigmi Dokoro).