Special Feature

WORLD HEALTH DAY 7 April 1975

SMALLPOX: POINT OF NO RETURN

MESSAGE FROM DR. HALFDAN T. MAHLER Director-General of the World Health Organization

World Health Day 1975 marks both the beginning of the end in our campaign to eradicate smallpox from the earth, and—in a larger sense—the beginning of a new era for the World Health Organization itself.

The eradication of smallpox will represent one of the historic milestones in medicine, but—more than that—this first global eradication of a major disease provides an outstanding example of the constructive results nations



can achieve when they work together toward the common cause of better health for all.

When the WHO smallpox eradication program began just eight years ago, 30 countries were endemic and many more reported importations of the virus. Now, entire continents have been swept clean of this dread infection, and the population still at risk is but a minute fraction of that over which it held sway just a decade ago.

In achieving these extraordinary results, the public health services of many nations have been strengthened—national reporting systems for the communicable diseases have been improved, better techniques for immunization have been developed, and communicable disease control services have evolved.

However, much remains to be done before we can feel assured that smallpox has indeed been vanquished. In the remaining endemic areas, we must identify the few, final chains of transmission and break them. Then programs of intensive surveillance must be continued for two years to ensure that there are no hidden foci of smallpox lurking anywhere. Finally, international commissions must investigate and verify that the disease has indeed been eliminated.

Until that point is reached, case detection and reporting systems must stay alert; containment systems must remain quick and strong. Only then can we feel absolutely confident—at last—of total victory over a disease that has devastated man since time began.

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Then, the resources developed to overcome smallpox can be focused fully on other major health problems that besiege us. However, when these future battles are entered, health services will be all the stronger, armed as they are with weapons shaped in the hot forge of the smallpox campaign.

Surely, the experience gained in overcoming smallpox must provide the basis for a more skilled and concerted attack against other communicable diseases. We can only dream of the great strides which could be made if the peoples of the world would together apply resources and energy to other common health problems as they have in the smallpox campaign—but dream we must.

For as victory over variola becomes certain, we are at the "point of no return." It is the beginning of the end for smallpox, which can never return to ravage the earth as in centuries past. But it is also the beginning of a new era for WHO, which—having shown what can be done to eliminate disease when all nations join together in a unified, coordinated effort—can now attack more effectively the multitude of other major health problems still confronting us.

MESSAGE FROM DR. HECTOR R. ACUÑA Director of the Pan American Sanitary Bureau

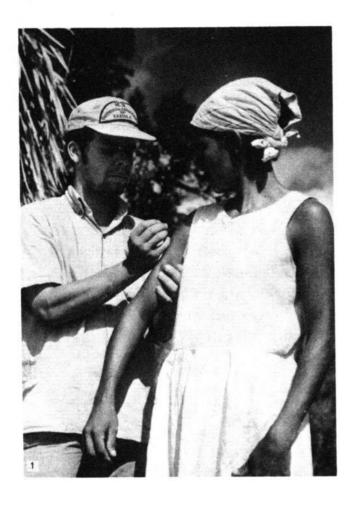
Smallpox reached this Hemisphere more than 400 years ago, and for nearly 180 years the world has known how to prevent it. Nevertheless, it is only four years since the Hemisphere banished the disease. Now the whole world is on the verge of reaching the same soughtafter goal.



The eradication of smallpox was awaiting only the united action of mankind. In effect, it was wiped out where there was firm determination to do so and where action was carried out simultaneously over wide geographic areas.

As with all momentous events, the smallpox campaigns have taught many lessons. Aside from efficient use of the bifurcated needle, jet injector, and freeze-dried vaccine, the management and administration of campaigns, training of medical and paramedical personnel, active involvement of the community, enhancement of information systems, and improvement of epidemiologic surveillance are activities whose significance extends far beyond the eradication of smallpox. We have also come to understand that diseases are not confined to one country, but that they transcend national, geographic, and political frontiers. Hence the need for a concerted effort in the struggle against them.

We must look to the future and apply the same determination, the same spirit of cooperation, to eliminate other scourges of mankind. In the Americas, the Ten-Year Health Plan has set goals for us, and the Governments are committed to their attainment. Indeed, infectious and parasitic diseases can and should be drastically reduced, some even eliminated from the Hemisphere altogether, in a relatively short time. Let us not forget that in working to bring health to the community, we are always at a "point of no return."



- 1. The conquest of smallpox in Brazil (State of Bahia). A participant in his country's national eradication effort, this variola campaign officer walked several kilometers into the jungle, where he found a house and vaccinated two people. This woman is being vaccinated for the first time in her life. (PAHO photo-Moquillaza.)
- 2. Preparing vaccine in India. The vaccine's potency is tested by injecting it into eggs. (WHO photo-P. N. Sharma.)
- 3. Filling the vaccine bottles before freezedrying, one of the final steps in smallpox vaccine production. The freeze-drying process ensures stability of the vaccine at any temperature. (WHO photo-J. Mohr.)
- 4. Smallpox vaccination with the bifurcated needle. This needle ensures quicker vaccination and more economic use of vaccine. (WHO photo.)







MESSAGE FROM THE PRESIDENT OF THE UNITED STATES OF AMERICA, MR. GERALD R. FORD, ON THE OCCASION OF WORLD HEALTH DAY 1975

World Health Day, 1975, has special significance for all Americans. This year's theme, "Smallpox: Point of No Return" calls attention to the successful completion of a global campaign. By the end of this year, smallpox, a disease which has afflicted mankind for generations, will no longer be a public health problem anywhere.



The smallpox eradication program, begun ten years ago by the World Health Organization, will have achieved its purpose.

We in the United States can be proud of the key role we have played in assisting the World Health Organization with this historic achievement. The Center for Disease Control of the Public Health Service has provided laboratory services and has trained scientists from many nations. We have also contributed to the World Health Organization's smallpox eradication programs in the nations of West Africa. The new techniques and equipment developed by this country's scientists for use in West Africa were subsequently introduced into Brazil, Indonesia, Sudan, Afghanistan, Nepal, Ethiopia, India, and Bangladesh. The final elimination of smallpox will be an historic achievement. The alleviation of human suffering is a major benefit. Perhaps as important, however, is the demonstration that international cooperation in areas of humane concern is both possible and highly effective.

The United States is proud to have supported the World Health Organization in its leadership role in worldwide smallpox eradication. On this occasion, I am pleased to reaffirm our commitment to its vital efforts toward the universal cause of better health for all.

THE WORLD SMALLPOX SITUATION TODAY

When WHO began its world smallpox eradication campaign in 1967 there were an estimated two and a half million cases of the disease in some thirty endemic countries. Today only five countries (Bangladesh, Ethiopia, India, Nepal, and Somalia) are still reporting smallpox cases, and the disease is still considered endemic in only the first three of these.

From 1 January to 19 March 1975, a total of 5,561 cases of smallpox had been reported to the World Health Organization. This represented a decrease of 87 per cent below the total recorded at this time last year and was, in fact, the smallest number of cases ever reported to the Organization for this part of the year.

Only 216 cases were reported from all of India during February, and as of 18 March there were only 63 known infected villages in the entire country. Nepal has detected only four new cases during the past three weeks and, although not yet smallpox-free, appears to be rapidly reaching that point. Ethiopia has so far detected only 544 cases, 60 per cent fewer than were detected during this same period last year and the lowest total recorded for the period since the smallpox program began.

In Bangladesh, however, the smallpox problem is of increasing concern. To date, 3,708 cases or 67 per cent of all cases throughout the world have been reported from Bangladesh, and—in contrast to India and Nepal—the total number of cases reported each week is mounting. During the past four weeks over 1,800 cases have been reported.

The total number of infected villages in Bangladesh has increased tenfold in less than five months—from 91 to 991. During this same period there has been a continuing and equally dramatic *decrease* in the number of infected

villages in other Asian countries-from 614 to 67

Smallpox in Bangladesh at the end of October 1974 had been confined almost entirely to the two northern districts of Mymensingh and Rangpur. Following the severe floods of last summer and the subsequent famine, hundreds of thousands of persons migrated from these infected areas searching for food and employment and carrying smallpox with them. In late December Dacca itself became infected, and from Dacca the disease spread to surrounding districts. The principal problem areas today are the four Disctricts of Rangpur, Mymensingh, Bogra and Dacca, but increasing numbers of outbreaks are now occurring in adjacent as well as more distant districts. Only four districts are still believed to be smallpox-free.

To combat the epidemic, a country-wide emergency mobilization has been undertaken under presidential directive and increasingly large numbers of national and international health staff are being mobilized. While partial control of the epidemic spread has been achieved in some areas, the numbers of cases, as well as the numbers of infected villages, are still increasing.

To date, India has detected nine importations of smallpox from Bangladesh into West Bengal and Assam. With increasing numbers of outbreaks in Commilla and Chittagong Districts, a new threat is posed to Tripura State in India as well as to Burma. Stricter measures are now being taken by the Government of India at all transit points out of Bangladesh, including roads and airports, but so long as the epidemic persists, additional importations must be anticipated. (WHO, Weekly Epidemiological Record, Volume 50, No. 12, 21 March 1975, pp. 121-124.)