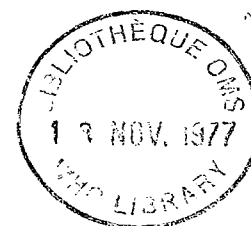




REPORT OF THE CONSULTATION ON WORLDWIDE  
CERTIFICATION OF SMALLPOX ERADICATION

held in Geneva from 11-13 October 1977



Introduction

The Twenty-ninth World Health Assembly on 19 May 1976 requested the Director-General "to undertake a study of the organization of a world conference on the problems of eradicated smallpox and to report on the subject to the Executive Board and to the Thirtieth World Health Assembly". Following this action, the Executive Board on 25 January 1977 expressed appreciation of the intensive efforts being made by the Organization and the countries concerned to interrupt smallpox transmission at the earliest possible date and to verify and document this achievement. In response to these requests, a Consultation on Worldwide Certification was convened in Geneva on 11-13 October 1977.

The Consultation meeting was opened by Dr I. Ladnyi, Assistant Director-General of WHO, who indicated that two years had elapsed since the last case of variola major had been reported in Bangladesh, and that what may be the last cases of variola minor are now being discovered in Eastern Africa. He proposed that a standing committee or commission would be useful to the Organization to assist in difficult decisions and to help resolve further problems that may be encountered before achieving global certification of freedom from smallpox.

The Director-General of WHO, Dr H. Mahler, addressed the Consultation later in the meeting, and emphasized the importance of the Smallpox Eradication Programme both in itself and for the impetus it has provided to many countries for undertaking a variety of other health-related activities. He endorsed the proposal that a standing commission for global certification should be established to advise him on the progress towards, and final achievement of, the global eradication of smallpox.

Consultation membership and procedure

Consultants (Annex 1) included virologists and epidemiologists experienced in smallpox eradication programme operations, the laboratory recognition of smallpox and related viruses, and certification procedures. Each was familiar with the philosophy, development and conduct of eradication programmes in several countries and regions, and each had intimate knowledge of the successes and problems encountered in programme operations within countries harbouring endemic smallpox. These consultants were assisted by WHO staff from headquarters and from each region. All available data were provided, including population statistics, data regarding verified smallpox cases and laboratory investigation reports, smallpox surveillance data, reports of rumours of possible smallpox cases with reports of the responses to these rumours by the Organization and the countries concerned. In addition final reports from all formal International Commissions on Smallpox Eradication which have been convened to date were provided.

A summary of the Agenda is shown in Annex 2. After an initial session concerning the development and progress to date of the global programme, its current status in each region and consideration of various topics including the future need for smallpox vaccine, the existence of possible animal reservoirs, potential sources for future outbreaks and the future need for storage and use of smallpox virus in selected reference laboratories (Working Papers 1-12), the following objectives of the Consultation were developed.

5.

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### Objectives

1. To evaluate the smallpox status throughout the world and the prospects for global certification. Countries would be considered as:
  - (a) those already certified as free from smallpox, or where sufficient information is presently available for immediate recommendation to the Global Commission;
  - (b) those where certification using the established commission procedures would be required;
  - (c) those where information and/or surveillance data are incomplete, and require special consideration or evaluation prior to final action by the Global Commission.
2. To develop a plan for final global certification.
3. To suggest an approach toward termination of all vaccination requirements for all countries.
4. To review the need for continuing smallpox surveillance, with emphasis on selected areas.
5. To review the need for further characterization of the orthopoxviruses closely related to variola virus.
6. To consider the requirements for storage of variola virus, including purposes, number of laboratories to be involved, and safety requirements.

The consultation group was organized into three sub-groups to consider in detail all available information on the occurrence of smallpox, past and present, in each country within the regions. Sub-Group I considered each country within the WHO African and Eastern Mediterranean Regions, Sub-Group II, the American and European Regions and Sub-Group III, the South-East Asia and Western Pacific Regions.

After reconvening in plenary session, the Sub-Group recommendations were carefully considered and the final recommendations by the Consultation were prepared and approved, with the understanding that as further information becomes available, additional activities and modifications may be necessary.

### Recommendations

#### 1. Global Commission

The Consultation was in agreement that the interruption of smallpox transmission was imminent. It was also agreed that this unprecedented achievement should be promptly certified and appropriately recognized. To assist in this effort and to provide authoritative endorsement, a formally constituted International Commission for the Global Certification of Smallpox Eradication (Global Commission) should be established by WHO to provide consultative assistance and verification of this event.

#### 2. The last known focus

Every possible approach must be utilized for intensive search, detection and containment activities in Somalia and adjacent areas until smallpox transmission is completely interrupted. These efforts must be continued thereafter until all criteria have been met for confirmation of eradication of smallpox in the world's last known focus of this disease. Specifically, every possible effort must be made to search recently inaccessible areas where smallpox has been rumoured to be present, in order to assure that reintroduction will not occur. Active surveillance measures must continue in established priority areas within countries surrounding this focus, including Djibouti, Ethiopia and Kenya.

### 3. Formal certification

Certification activities by designated International Commissions should be scheduled by WHO so that global eradication can be confirmed by the end of 1979, assuming that smallpox transmission is interrupted during 1977. Appropriate recommendations could then be made to the Thirty-third World Health Assembly. Areas to be scheduled for certification include:

- (a) South East Asia - Bangladesh, Burma (scheduled for November-December 1977);
- (b) Southeast Africa - Malawi, Mozambique, Tanzania, Zambia (scheduled for March 1978);
- (c) Sudan - Uganda;
- (d) Southern Africa I - Angola, Botswana, Lesotho, Swaziland;
- (e) Southern Africa II - Namibia, South Africa, Southern Rhodesia;
- (f) East African and neighbouring countries - Democratic Yemen, Djibouti, Ethiopia, Kenya, Somalia, Yemen.

### 4. Country visits

Visits by Global Commission members or consultants and/or WHO staff should be arranged during 1978 to verify and document the smallpox eradication status within the following countries: China, Iran, Iraq, Syria and Thailand.

China. Although it is understood that there is no smallpox transmission in China, because of its great size and large population more detailed information than is currently available will be required for certification. A visit should be arranged for a group which includes members of the Global Commission.

Iran, Iraq and Syria had stopped smallpox transmission before 1970 but were infected with variola major in 1971-1972, following the introduction of smallpox into Iran from Afghanistan; smallpox subsequently spread into Iraq and Syria. Because of the extent and duration of the outbreak and the fact that the disease was variola major, it is proposed that each country be asked to submit a detailed report of their surveillance programme and smallpox activities during at least the past five years. After this, it is proposed that members of the Global Commission visit each country to review the situation.

For Thailand, the extensive communications with India and Bangladesh indicate the need for evaluation, particularly regarding the border area between Thailand, Burma and Laos. A visit should be made by members of the Global Commission.

### 5. Detailed country reports

WHO should request certain countries to provide special detailed reports, including but not limited to verification of smallpox incidence data since 1960, an account of the last known outbreak and control measures employed, and the method of approach should a suspected case of smallpox be recognized. Bahrain, Kuwait, Oman, Qatar, Saudi Arabia and the United Arab Emirates have been free of endemic smallpox for many years but have experienced sporadic importations during the past decade. It is proposed that the Secretariat-General for the Ministers of Health of the Arab States of the Gulf should be asked to coordinate this effort.

Reports of this type should also be requested for several other countries about which detailed information is lacking: Democratic Kampuchea, Laos, Madagascar and the Socialist Republic of Viet Nam. WHO should seek additional information regarding the Taiwan Province of China.

6. Formal statements by countries

WHO should obtain a signed statement from all countries and areas listed in Annex 3 indicating that smallpox has not been present in that country during the past two years. Certification by an International Commission will constitute such a statement.

7. Variola virus stocks

Specified WHO Collaborating Centres should retain variola virus stocks for research purposes; all other laboratories should transfer their stocks to a WHO Collaborating Centre or destroy these stocks. It is recommended that WHO should urge government authorities to take appropriate stringent measures to ensure that this is done.

All laboratories retaining variola virus should be visited by selected members of the Global Commission. By 1980 the number of laboratories retaining variola virus should be reduced to not more than four WHO Collaborating Centres. The need for retention of virus stocks should be reassessed periodically. Laboratories retaining variola or whitepox virus must adhere to recommended safety measures (Workshop Meeting on Safety Measures in Laboratories Retaining Variola Virus, Geneva, 1-4 August 1977).

8. Animal orthopoxvirus studies

Surveillance of poxviruses should be continued in both human and animal populations near areas where cases of human monkeypox have occurred, and where animals harbouring whitepox viruses have been captured. A special research project is recommended in the Equateur region of Zaïre.

9. Vaccination policy

Vaccination policy between the present time and final certification should be determined by each government depending on its own assessment of risks and benefits. Subject to this, it is the opinion of the Consultation that routine vaccination is clearly indicated only in countries in Africa and Asia where smallpox has been endemic during the last few years, and in those at specific epidemiological risk.

The Consultation endorses the resolution of the Twenty-ninth World Health Assembly recommending that Governments restrict their requests for smallpox vaccination certificates to travellers who, within the past 14 days, had visited a smallpox-infected country.

When global eradication has been certified, vaccination should be terminated.

10. Vaccine stocks

Provision should be made by WHO for storage of approximately 300 million doses of smallpox vaccine distributed among at least three locations. Further study should be carried out on the need for and distribution of emergency vaccine stocks and vaccination instruments.

Conclusion

The recommendations include steps toward the ultimate global certification of freedom from smallpox. The visits and International Commission evaluations should be scheduled by WHO in accordance with time constraints, availability of data and consultants and other factors. It is expected that two years may be required to accomplish the goals as presently outlined.

The Consultation group hopes that their deliberations have been helpful in hastening the progress toward the goal of a world free from smallpox. All members of the group offer their assistance and participation in future visits and meetings that may be needed to achieve this goal at the earliest possible date. They also record their appreciation of the excellent staff support and facilities provided during the Consultation.

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## AGENDA SUMMARY

11 October 1977

Opening Comments - Dr I. Ladnyi

Conference Objectives and Agenda - Dr I. Arita

Smallpox Eradication, Past and Present

Smallpox Eradication: A Global Appraisal - Dr P. F. Wehrle WP.1

Current Status of the Smallpox Eradication Programme - Dr I. Arita

Status of Smallpox Eradication and Certification Activities in the WHO regions

Regional Office for Africa - Dr C. Algan WP.2

Regional Office for the Americas - Dr K. Western WP.3

Regional Office for the Eastern Mediterranean - Dr P. Chasles WP.4

Regional Office for Europe - Dr M. Radovanovic WP.5

Regional Office for South-East Asia - Dr L. N. Khodakevich WP.6

Regional Office for the Western Pacific - Dr R. Lindner WP.7

Certification of World-Wide Smallpox Eradication: Summary of Status in  
Regions and Future Activities - Dr J. G. Breman WP.8Other Issues Relevant to Certification

Future of smallpox vaccination and vaccine storage - Professor H. Lundbeck WP.9

Is there an animal reservoir of smallpox? The problem of monkeypox, whitepox  
viruses and other non-human poxviruses - Dr F. Fenner WP.10A consideration of some potential sources for future outbreaks of smallpox -  
Professor K. R. Dumbell WP.11Laboratories presently maintaining smallpox virus: Safety considerations  
and the need for diagnosis and research - Dr S. S. Marennikova WP.12

Summary of other issues relevant to certification - Dr I. Arita

Constitution of sub-groups with review of objectives and proposed method for  
preparation of sub-group region reports

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Annex 2

12 October 1977

Sub-group meetings

Sub-Group I

- (a) African Region
- (b) Eastern Mediterranean Region

Sub-Group II

- (a) The Americas
- (b) European Region

Sub-Group III

- (a) South-East Asia Region
- (b) Western Pacific Region

13 October 1977

Plenary discussion of preliminary sub-group recommendations

Agreement on final recommendations



COUNTRIES AND AREAS TO PROVIDE A FORMAL STATEMENT OF THEIR SMALLPOX-FREE STATUS

| REGION - AMRO   | REGION - EURO   | REGION - EMRO  | REGION - WPRO  |
|---|---|--|--|
| <p>Bahamas<br/>Barbados<br/>Canada<br/>Costa Rica<br/>Cuba<br/>Dominican Republic<br/>El Salvador<br/>Grenada<br/>Guatemala<br/>Guyana<br/>Haiti<br/>Honduras<br/>Jamaica<br/>Mexico<br/>Nicaragua<br/>Panama<br/>Suriname<br/>Trinidad and Tobago<br/>United States of America</p>   | <p>Albania<br/>Algeria<br/>Austria<br/>Belgium<br/>Bulgaria<br/>Czechoslovakia<br/>Denmark<br/>Finland<br/>France<br/>German Democratic Republic<br/>Germany, Federal Republic of<br/>Greece<br/>Hungary<br/>Iceland<br/>Ireland<br/>Italy<br/>Luxembourg<br/>Malta<br/>Monaco<br/>Morocco<br/>Netherlands<br/>Norway<br/>Poland<br/>Portugal<br/>Romania<br/>Spain<br/>Sweden<br/>Switzerland<br/>Turkey<br/>Union of Soviet Socialist Republics<br/>United Kingdom<br/>Yugoslavia</p> | <p>Bahrain<br/>Cyprus<br/>Egypt<br/>Iran<br/>Iraq<br/>Israel<br/>Jordan<br/>Kuwait<br/>Lebanon<br/>Libyan Arab Jamahiriya<br/>Oman<br/>Pakistan<br/>Qatar<br/>Saudi Arabia<br/>Sudan<br/>Syrian Arab Republic<br/>Tunisia<br/>United Arab Emirates</p> | <p>Australia<br/>China<br/>Democratic Kampuchea<br/>Fiji<br/>Japan<br/>Lao People's Democratic Republic<br/>Malaysia<br/>New Zealand<br/>Papua New Guinea<br/>Philippines<br/>Republic of Korea<br/>Samoa<br/>Singapore<br/>Socialist Republic of Viet Nam<br/>Tonga</p>   |
|   |   | <p>REGION - SEARO</p> <p>Democratic People's Republic of Korea<br/>Maldives<br/>Mongolia<br/>Sri Lanka<br/>Thailand</p>  | <p>American Samoa (United States of America)<br/>Brunei (United Kingdom)<br/>Cook Islands (United Kingdom)<br/>French Polynesia<br/>Gilbert Islands (United Kingdom)<br/>Guam (United States of America)<br/>Hong Kong (United Kingdom)<br/>Macao (Portugal)<br/>New Caledonia (France)<br/>New Hebrides (France)<br/>New Hebrides (United Kingdom)<br/>Niue (New Zealand)<br/>Republic of Nauru<br/>Ryukyu Islands<br/>Solomon Islands (United Kingdom)<br/>Taiwan, Province of China<br/>Trust Territory of the Pacific Islands (United States of America)<br/>Wallis and Futuna (France)<br/>Tokelau Islands (New Zealand)<br/>Tuvalu</p> |
|   |   |  |  |
| <p>Antigua<br/>Belize<br/>Bermuda<br/>British Virgin Islands<br/>Cayman Islands<br/>Dominica<br/>Falkland Islands (Isles Malvinas)<br/>French Antilles and Cayenne<br/>Montserrat<br/>Netherlands Antilles<br/>Puerto Rico<br/>St Kitts-Nevis-Anguilla<br/>St Lucia<br/>St Vincent<br/>Turks and Caicos Islands<br/>Virgin Islands (United States of America)</p> | <p>Andorra<br/>Channel Islands<br/>Faroe Islands<br/>Gibraltar<br/>Greenland<br/>Holy See<br/>Isle of Man<br/>Liechtenstein<br/>San Marino</p>  |  |  |
| <p>REGION - AFRO</p> <p>Cape Verde<br/>Comoros<br/>Madagascar<br/>Mauritius<br/>Sao Tome and Principe<br/>Reunion<br/>Seychelles<br/>St Helena</p>  |   |  |  |