It seems probable that a goal of this kind has been most nearly attained (aside from those families completely uninhibited by economic considerations who have a family physician regularly on call for hygienic guidance) in groups of persons who enjoy the advantages of a prepaid group practice unit. This situation is found in certain localities under the HIP of New York; and in certain coöperative and labor groups. Here there is no financial inhibition to limit resort to the family physician, since the service is prepaid. There is no temptation to use the specialist too little or too much, since no financial competition between one physician and another is involved; and there is opportunity for the fullest and most fruitful continuing coöperation between the family physician and the specialist.

The degree to which such an ideal three-sided relationship between family and family physician and specialist can be attained should be a primary criterion in the judging of any proposal for improving the medical care of the American people.

## THE NEW INTERNATIONAL SANITARY REGULATIONS

WHEN official delegations representing 64 countries at the Fourth World Health Assembly unanimously voted the new International Sanitary Regulations, they not only established greatly improved procedures in foreign quarantine but also affirmed that world law can be written even where interests clash. These Regulations, which from October 1, 1952, will govern all sanitary measures that may be applied to international traffic, will have force of treaty for all Member States of the World Health Organization in so far as specific reservations have not been made before next March.

Interests do indeed clash in matters relating to foreign quarantine. The extraordinary development of civil aviation permits us to reach points in Africa or Southern Asia in two or three days, and the volume of air traffic already exceeds that of maritime traffic, so far as passengers on an international journey are concerned. We cannot afford to lose this advantage on account of quarantine hindrances. On the other hand, we cannot lose sight of the fact that the incubation period of many dangerous epidemic diseases is longer than the time it takes to go around the world. Hundreds of millions of dollars are invested in the means of fast communications, but great epidemics are not less costly.

India and Pakistan are acutely aware that the introduction of yellow fever into their *Aedes*-infested countries might cost tens of millions of lives, and, once established, it would be almost impossible to eradicate the disease on account of the presence of a multitude of susceptible monkeys. Egypt is living in dread of cholera, which caused over 10,000 deaths when last introduced in 1947. Indonesia and the Philippines, too, must keep cholera out. The wool industry of Australia could be ruined should rabies be introduced.

The United States need no longer seriously fear cholera, plague, typhus or yellow fever, which cannot develop into epidemics against our highly developed sanitary defenses. We are still vulnerable to smallpox because in many parts of the country the state of vaccination is not what it should be. Fortunately, our modest quarantine requirements need not interfere with our rapidly growing interests in world traffic.

Until recently the United States policy in matters of foreign quarantine has been highly protectionist. In 1926 and 1933, when ratifying the International Sanitary Conventions for Maritime and Aerial Navigation, respectively, the reservations of the United States amounted to the statement that we would do as we saw fit. In 1951, the United States, together with the United Kingdom and others, has taken the lead in limiting arbitrary action, and we have claimed no privileged position for ourselves.

At present, international rules regarding foreign quarantine are in a state of chaos because of the tardiness of many countries in ratifying the international conventions and failures to abide by them. Thirteen International Sanitary Conventions dating from 1903 to 1944, all of them more or less outmoded, govern the measures which the various countries may take at their frontiers. Some of the newer countries are bound by no agreements. Unnecessary inconveniences to travelers, to shipping and air lines are most serious. Only a few months ago, traffic from Near East countries to Arabia was brought to a standstill on account of a local plague outbreak in a remote village of Yemen.

All of these old conventions and partial agreements will be swept away by the new Regulations, and law and order will prevail from a set date.

The first International Sanitary Conference met in Paris—without success—in 1851, and so the new Regulations are the result of a century's effort. International legislation in this important field became possible not only on account of Articles 21 and 22 of the WHO Constitution, but also because public health workers have developed a sense of international professional solidarity. This awareness of world health as an indivisible whole has received an important impetus through the recent growth of the World Health Organization and the technical assistance projects.

The new approach to the problem which appears in the Assembly resolutions introducing the Regulations is well expressed in the explanatory memorandum of WHO: "A community is more effectively protected against pestilential diseases by its own public health service than by sheltering behind a barrier of quarantine measures." Governments were invited by the Assembly to improve sanitary conditions in their own countries, especially around seaports and airports, and to relax the permitted measures whenever possible.

The text of the Regulations was worked out in a Special Committee to which all countries were invited to send delegations. The Committee met in Geneva, Switzerland, before the World Health Assembly and discussed the Articles in daily meetings for a month on the basis of a draft prepared the year before by the WHO Expert Committee on Epidemiology and Quarantine. The American member of the Expert Committee was Dr. G. L. Dunnahoo, Chief of the Division of Foreign Quarantine, U. S. Public Health Service. The Public Health Service members of the U. S. Delegation to the Special Committee were Dr. Joseph A. Bell, Chief of Epidemiology, National Microbiological Institute, and Dr. Knud Stowman, Foreign Affairs Health Adviser. There were also delegates from the Department of State, the U. S. Air Force and the American Airlines.

Foremost among the principles successfully promoted by the U. S. Delegation was that successful control of international transmission of pestilential diseases, as well as removal of hindrances to international travel, depends in the first instance on immediate and complete information from all parts of the world regarding the appearance of these diseases and all the relevant circumstances. At present, more than half of the restrictive quarantine measures are due solely to the lack of rapid

and reliable information regarding the occurrence of smallpox, rat plague in ports, and jungle yellow fever.

All countries have to report annually to WHO on the workings of the Regulations—another American proposal. Periodic revisions of the Regulations can therefore be undertaken in full cognizance of the facts. Hitherto only personal opinions and theoretical considerations served as guides in the preparation of Sanitary Conventions. Machinery is also set up to settle international conflicts concerning the application of quarantine measures.

Other provisions concern the establishment of transit areas in airports where passengers and crew can be segregated, thus avoiding the measures which may be taken against an infected area.

The eradication of Aedes aegypti in a large part of Latin America has been taken into account and Aedes-free districts are no longer considered part of the quarantinable yellow fever areas. Measures against plague other than the pneumonic type are now entirely based on control of rodents and their ectoparasites. The provisions for disinsectization and other measures on departure from infected areas have been strengthened.

A smallpox vaccination certificate may be required from any person on an international journey. There is no defense other than vaccination against the spread of smallpox, and this measure seems necessary so long as the disease is so widespread. Keeping up the state of vaccination among those traveling abroad contributes directly to our home defense against smallpox. At the same time, the smallpox certificate was simplified so that a shorter waiting period and fewer-signatures are required. No charge may be made for vaccinations performed on arrival.

A simplification of all sanitary documents is noted. Maritime declarations of health, deratting or deratting-exemption certificates and yellow fever, smallpox, and cholera vaccination certificates are the only sanitary documents which may be required for international travel. Radio pratique for ships approaching port is encouraged.

Technically, the new International Sanitary Regulations are undoubtedly a most important step forward, not only in the handling of international travel formalities but also in the measures for control of pestilential diseases. This demonstration of world legislation reveals a startling advance made in international technical collaboration during the last seven years of which we hardly are aware. It was in 1944 that the last International Sanitary Conventions were signed, and in those seven years only 18 ratifications have been obtained. In 1951, professional public health administrators properly accredited by their governments sat down together and worked out a sensible up-to-date plan, keeping human rights and scientific facts in mind, and a year later it will become world law.

We think that perhaps most people are inclined to be too pessimistic when appraising the future of relations between nations.