

MEDICINE

Still No Cure for Colds

► THE CURE for the common cold remains as elusive as ever. Any of 100 new viruses could cause the separate symptoms.

Vaccines may have to contain as many as 20 or 30 antigens (dead or weakened viruses) to be effective against cold-like illnesses, Dr. Robert J. Huebner, chief of the laboratory of infectious diseases at the National Institutes of Health, believes.

Announcement of another virus believed to cause a certain number of common colds points up the fact that many viruses cause respiratory diseases.

The most recent news on common cold causes is that Coxsackie A-21, a virus usually found in man's intestines, was discovered in the throats of Marine cold sufferers at Camp LeJeune, N. C. A vaccine against this particular virus may be effective, but it must first be proved that Coxsackie A-21 is a substantial contributor to the occurrence of colds.

It is not unlikely, the Journal of the American Medical Association said in an editorial, that intestinal viruses may prove to be as significant in the cause of adult colds as are the para-influenzal and respiratory syncytial (RS) viruses in the diseases of young children.

The National Institute of Allergy and Infectious Diseases at Bethesda, Md., has reported that viruses such as parainfluenza

and respiratory syncytial, which often produce severe illness in infants and children during the first infection, may cause mild colds in adults. Such an infection usually means reinfection by an agent previously encountered in childhood.

Such adult illnesses are mild, and laboratory diagnosis of blood and virus is difficult because of the partial immunity conferred by the previous infection.

More rapid strides have been made in finding causes of serious respiratory illness than in getting at the causes of the common cold. Sixty percent of the severe respiratory illnesses of children can now be explained by viruses or filterable agents.

Involvement of the respiratory syncytial virus in an outbreak of pneumonia affecting 36 of 90 children under four years of age has been reported by the National Institute of Allergy and Infectious Diseases.

The Eaton agent, an important cause of pneumonia, has been grown for the first time in a cell-free medium and shown to be a member of an obscure group of microbes called "PPLO," or pleuropneumonia-like organisms. This is the first PPLO linked with any human disease, it was reported in Proceedings of the National Academy of Sciences.

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PNEUMONIA CAUSE—The Eaton agent, an important cause of pneumonia, is shown here in colonies after being grown for the first time without living cells. The pleuropneumonia-like organisms are in ball-shaped clusters on an agar plate.

roving inspection teams looking for secret attempts to violate the disarmament agreement. The Soviet Union has accepted the principle of fixed control teams at military bases, airfields, ports, launching sites and munitions factories, but it objects to roving inspection teams authorized to go anywhere.

The Sohn system proposes a plan for disarmament and control over a six-year period, or two years longer than the Soviet Union wants.

The territories of the United States and the Soviet Union would be divided into six regions, each nation delimiting the regions so that each region would contain approximately equal amounts of armaments and other objects of control.

Lists of armaments in each region would be submitted, preferably to an international agency. One region would then be chosen for disarmament and control, but the choice would not be known in advance.

If inspection showed that a nation had more armaments in the control region than listed, the deception would be easily discovered. Deception would carry its own self-punishment, since it would mean that the nation concerned would have to make a larger cut in its military forces and armaments in that region in order to retain only one-sixth of the national total permitted by the agreement.

The Sohn plan also calls for stationary inspection teams at key places. To prevent last-minute shifts between regions, inspection teams would be stationed at the borders of each region, just before annual selection of regions to be disarmed.

As Dr. Sohn has pointed out, the territorial method he proposes offers important advantages, "both technical and political."

Previous territorial limitations, notably the Rapacki plan to demilitarize Central Europe, were rejected largely on the grounds of discrimination against West Germany.

The Sohn plan is believed to be favored by scientists in ACDA.

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MILITARY SCIENCE

Plans for Disarmament

► DISARMAMENT, beginning with an East-West treaty to ban nuclear tests, clearly remains the prime goal of this Administration despite its current preparations to resume nuclear tests in the atmosphere.

However, such a treaty agreement would have to have "adequate inspection in regard to preparations, as well as testing," President John F. Kennedy stated recently.

Thus while the goal is clear, the terms and conditions under which it may be achieved still remain unsettled.

The fact that the President emphasized the need for adequate inspection to prevent sneak preparations by the Russians for any kind of atomic weapons testing has led some observers to believe that this would mean having inspectors in atomic research centers and all nuclear test sites.

The Soviets are not likely to accept such conditions. They rejected Western proposals for an atmospheric test ban subject only to monitoring by teams outside their territory. Therefore, if such total and rigid conditions for inspection are what the President had in mind, the hope of achieving any agreement leading to disarmament would appear to be dim indeed.

The fact is, however, that flexibility rather than rigidity underlies the Administration's attempts to find a way to end what Presi-

dent Kennedy has called the "deadly business" of arms competition.

The Arms Control and Disarmament Agency, under the direction of William C. Foster, currently is studying several proposals for inspection techniques for disarmament, including the use of statistical sampling in inspection systems and zonal inspection arrangements. Both of these systems, under serious consideration, are far from the complete and total inspection systems, covering industry, research laboratories and test and missile sites, which some have said the President meant when he referred to inspection to protect against secret preparation for tests.

ACDA staff has been examining a plan proposed by Dr. Louis B. Sohn of Harvard University in which disarmament and controls would go hand in hand. Under the Sohn method, each cut in armaments would be accompanied by the extension of inspection and controls to a specified part of a nation's territory, "the size of the controlled territory growing in proportion to the amount of the arms reduction."

The Sohn method very specifically takes into account the differences in approach to control and inspection between East and West. For example, the United States favors both on-the-spot inspection limited to certain activities and places and unrestricted