

VIROLOGY

Children Hit by New Virus

Surgeon General Burney has announced discovery of previously unrecognized group of hemadsorption viruses causing 50% more respiratory illness than influenza in children.

➤ A NEWLY recognized group of viruses was responsible for more acute respiratory disease among hospitalized children last year than influenza, U. S. Surgeon General Leroy E. Burney announced.

The disease organisms, known as hemadsorption viruses (HA), were recently discovered by scientists of the National Institutes of Health, Bethesda, Md., and Children's Hospital, Washington, D. C.

Dr. Burney said results of a large-scale study show that, on a yearly basis, the HA viruses cause 50% more respiratory illness than influenza in children.

A total of 1,738 children at three hospitals in the District of Columbia area were studied. The scientists cautioned that the findings may not necessarily apply to the whole nation.

Of all respiratory diseases taken into account, HA viruses were responsible for 20%, Asian influenza for 13% and other infectious organisms for the remainder. Unlike flu viruses, which tend to produce explosive outbreaks over limited periods, the HA group causes illness throughout the year.

Infections observed in the study ranged

from mild, fever-producing illness to pneumonia and to croup, a sometimes fatal childhood disease. About 42% of the croup cases were caused by the HA viruses.

Assessing the study as an important advance against one of our major public health problems, Dr. Burney said:

"For the first time we are beginning to discern the actual outline of the problem: what viruses are involved in these widely prevalent illnesses; how frequently they attack the population; and what age groups are most susceptible. These are the questions which must be answered before we can expect to devise practical preventive measures, such as vaccines, with much hope of success."

The work was done by Drs. Robert M. Chanock, M. Katherine Cook and Albert Z. Kapikian, of the National Institute of Allergy and Infectious Diseases, and Drs. Robert Parrott and Andrew Vargosko and Miss Alia Lukey of the Research Foundation of Children's Hospital.

The researchers employed virus isolation studies, supplementing them with determinations of antibody levels in patient blood serum. The children under study were

matched against a group of healthy controls of the same socio-economic backgrounds.

Additional reports on the HA viruses are now under preparation and will be published in scientific journals in the near future.

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GEOPHYSICS

Lithium in Atmosphere Charged to H-Bomb Test

➤ THE LITHIUM ATOMS found high in the atmosphere during 1957 and 1958 resulted from exploding hydrogen bombs, Dr. D. R. Barber of the University of Exeter's Norman Lockyer Observatory, Sidmouth, England, reports.

He says it is "highly probable" that the mysterious lithium airglow observed in south polar regions was man-made and totally unrelated to passage of meteoritic dust through the earth's upper atmosphere, as some scientists suggested.

If the mushroom-like cloud of the hydrogen bomb exploded in August, 1958, released lithium atoms at a height of about 96 miles, then the lithium airglow would last about 90 days after the detonation, Dr. Barber calculates. A study of observations has partly verified this calculation, reported in *Nature* (Feb. 7).

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PUBLIC HEALTH

Resuscitation Device Will Fit in Beach Bag

➤ A PLASTIC RESUSCITATOR that is small and light enough to be packed in a beach bag has been developed by a Washington, D. C., doctor.

Five minutes of instructions on how to operate the device can save a drowning person's life, Dr. Allen S. Cross, designer, said.

The lifesaving gadget weighs only two ounces. It is made of sturdy plastic and has a long shelf life. Dr. Cross has labeled it the Venti-Breather.

It consists of a tube containing a valve, exhaust vent and attached mask. The valve within the tube passes the rescuer's exhaled breath into the victim's mouth, nose, throat and lungs. The vent allows the victim's exhaled breath to pass from the tube without returning to the rescuer's mouth.

This resuscitator avoids actual mouth-to-mouth contact. It will be useful at swimming pools, in hospital wards, as equipment for electric linemen, survival equipment for each branch of the armed services, and, in the event of atomic attack, as a man-to-man life-saver, Dr. Cross, medical consultant on emergency resuscitation for the U. S. Air Force, pointed out.

The device is not yet generally available on the market. But it is simple, sanitary and safe enough for anyone to operate and may someday become standard beach equipment for each family, he said.

Dr. Cross is technical advisor for the U.S. Air Force training film 1-5192 showing the mouth-to-mouth resuscitation technique.

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NEW RESUSCITATOR—This lightweight resuscitator is made of plastic. Boy Scouts are shown learning the simple technique required to save a life.