

feron. They have completed biochemical tests on four. Within 12 to 24 hours after administration of the drug, interferon was found in the blood of two. "This gives us confirmatory evidence of interferon induction that was missing until now," says Dr. Hilleman.

One patient developed a slight fever from poly I:C. No other side effects were observed at the doses given: between 25 and 200 micrograms per kilogram of body weight. In continuing experiments to be reported in late spring, the scientists will test patient response to gradually increased doses until a maximum safe level is determined.

It is too early to realize the full implication of the recent human tests, Dr. Hilleman points out. From previous fundamental study there is evidence that poly I:C induces antiviral interferon and halts tumor growth by two entirely different mechanisms. Trials in patients so far neither support nor deny either effect.

Says Dr. Hilleman, "It is far too soon to even speculate about poly I:C anticancer activity in man."

Dr. C. Gordon Zubrod of the National Institutes of Health in Bethesda, Md., agrees. He and co-workers, including Dr. Hilton Levy, recently initiated trials of poly I:C in patients with advanced cancer, though it will be a matter of months before they have evaluated the drug's effects. "We have not even reached the maximum dose yet," says Dr. Zubrod, who also speculates that, "Even if poly I:C has no anticancer activity it may prove helpful in some virus diseases."

**Fighting virus diseases**, particularly the common cold, is what Dr. Hilleman sees as a role for poly I:C. The next research step will be to give the drug to human volunteers who would then be exposed to viruses.

There is some encouraging evidence for this. When poly I:C is given intravenously in very high doses to animals it produces toxic effects. But when administered topically has no ill effects at all. As eye drops, for example, poly I:C has been used to cure rabbits of a potentially blinding eye infection caused by the herpes simplex virus.

As an anticold drug, poly I:C might be administered in the form of a spray or mist that would enter the lungs or nasal passages directly. In this way, by not giving it by injection into the blood, the toxic effects may be minimized.

While interferon workers in the United States lean to the view that the only way to harness interferon is to stimulate its levels in the body artificially, European scientists favor the idea of using interferon itself as a drug (SN: 8/23, p. 149). □

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## PUBLIC HEALTH

### A vote against cigarettes

Last June, just before a law expired that effectively blocked any Government action against cigarette advertising, the House of Representatives adopted a replacement act strikingly similar to the original (SN: 6/14, p. 574). The House bill changed the warning on cigarette packages to read, "The Surgeon General has determined that cigarette smoking is dangerous to your health and may cause lung cancer and other diseases." At the same time, it went a long way toward tying the hands of the Federal Trade Commission, which has been threatening to require advertisements to carry a warning as well. The House bill would bar further regulatory action on advertising and labeling of cigarettes until 1975.

**When the House** bill passed, Rep. Harley Staggers (D-W. Va.) predicted trouble from antismoking forces in the Senate. His prediction was accurate.

The Senate last week showed itself less concerned with placating the tobacco industry than was the House. By a vote of 70 to 7 the Senate passed a bill that would ban cigarette advertising on television and radio as of January 1, 1971. And if the tobacco industry then channels the bulk of its advertising dollars to newspapers and

magazines, the door is open to an FTC regulation demanding health warnings in newspaper and magazine ads. Whether or not the print media are flooded with cigarette ads after January 1, the FTC can move in any case after July 1, 1971.

The House is not expected to accept the Senate version of the cigarette bill. A compromise, which could be tougher than the House bill, will be worked out in Senate-House conference.

**The fighting** in conference is expected to be tough. The cigarette industry is experiencing the sharpest drop in sales since the campaign against smoking started in 1964. The National Center for Health Statistics reported this week that 2.5 million smokers kicked the habit in the last three years, and that the number of young people not starting is increasing. And a BUSINESS WEEK study of the industry reported last week that cigarette sales are off by 10 billion, or 2 percent, from the 1968 level.

In light of this, the tobacco industry and its Congressional allies might be willing to accept a compromise law requiring health warnings in advertising as an alternative to the crippling Senate proposal.

## TEACH-IN

### Ecology on the campus

Student civil rights demonstrations in the early sixties forged the weapons that were adopted later in the decade by the opponents of United States military policies and what came to be called the academic establishment.

**Now shifting** their targets to concern for the environment, students across the country are planning a massive ecological-environmental teach-in on university campuses for April 22. It promises to become a focus for what appears to be an emerging theme of student protest at the turn of the decade.

There have already been sporadic environment-oriented demonstrations on some campuses, and students at at least 200 colleges and universities have agreed to participate in the April event. The April teach-in's organizers expect the day to dwarf even the massive civil rights and moratorium day demonstrations.

"Even the Vietnam protest is a warm-up for this," comments Bob Waldrop, local coordinator for Sierra Club activities in Washington, D.C. "If the kids see no sense coming out of this, it's going to hit the fan."

The idea for a national teach-in as a campus-oriented response to the growing environmental crisis began with Sen. Gaylord Nelson (D-Wis.) last January. Nelson was joined by California Rep. Paul McClosky, a Republican, and the broad outlines of the teach-in were drawn at an October conference at Airlie House in Virginia, which attracted a national cross-section of student leadership.

**Since then**, teach-in commitment appears to have snowballed; Nelson, McClosky and Sydney Howe, president of the Washington, D.C.-based Conservation Foundation, formed the non-profit Environmental Teach-In, Inc. to coordinate the effort but not to direct its methods.

"It is our hope that every campus and community in the country will get involved in this," says one ETI staff member.

A pattern for the nationwide demonstration may be set at the University of Michigan at Ann Arbor; students and faculty plan a four-day environmental session from March 11 to March 14.

The Michigan movement began with