

Federal officials take aim at AIDS

Public health officials, heads of government agencies and President Reagan all made major announcements about AIDS late last month. Among the highlights:

- Reagan appointed 12 members to a national commission on AIDS. The panel, which is to meet for the first time after Labor Day, is to advise the President on the "medical, legal, ethical, social and economic impact" of AIDS. Critics of the President's choices note that he failed to include a scientist engaged in AIDS research, a physician who treats AIDS patients or an expert in health-care financing. The panel does, however, include members with a wide variety of views about the deadly disease. Members range from Frank Lilly, an openly homosexual physician and geneticist at New York's Albert Einstein University Medical Center, to Cardinal John J. O'Connor, the Roman Catholic Archbishop of New York, who has denounced homosexuality as a sin and is opposed to education campaigns that advocate the use of condoms. The commission is to give a preliminary report in three months. A final report is due within a year.

- State-supported AIDS education was an issue at the National Conference of State Legislatures' annual meeting in Indianapolis. Woodrow A. Myers Jr., Indiana health commissioner and an appointee to Reagan's panel, spoke out in favor of AIDS education in schools. "The people who are going to have AIDS in 1991 are in high school today," he said. "The people who are going to have AIDS in 1995 are in grade school." Studies indicate that 57 percent of the nation's 25 million teenagers are sexually active by age 17, and that up to one-third of these teenagers don't use contraception. Compared with other age groups, teenagers already have the highest rate of sexually transmitted diseases.

- Federal officials met at the Centers for Disease Control (CDC) in Atlanta to discuss a number of controversial policy proposals aimed at preventing the transmission of AIDS in hospitals. The meeting was called following disclosure in May that three health-care workers had become infected with the AIDS virus after being splashed with AIDS-infected blood (SN: 5/23/87, p.326). New guidelines under discussion may require more routine testing of hospital patients, or even routine testing of health-care workers. Increased testing is supported by some — including presidential commission appointee Penny Pullen, who has already introduced such legislation in the Illinois State House of Representatives. Others, however, point out that despite an increasing fear of AIDS, health-care workers have not developed a disproportionately higher number of AIDS cases compared with the U.S. labor force as a whole. "There are no data to support the view that testing patients will make us safer," says David Henderson, chief epidemiologist at the National Institutes of Health's Clinical Center.

- The degree to which health-care workers should be required to wear protective clothing is also getting federal attention. The CDC has since November 1982 recommended the use of protective gloves and gowns for health-care workers, and has said that all blood and urine specimens should be treated as if they were contaminated with AIDS. The Public Health Service and the American Hospital Association have made similar recommendations. Compliance, however, has been voluntary — and reportedly low. Now the Labor Department has announced it will begin penalizing health-care employers who fail to enact safeguards recommended by the CDC and other public health agencies. The policy will be enforced by the Occupational Health and Safety Administration (OSHA), an arm of the Labor Department, and may result in fines of up to \$10,000 per violation. Meanwhile, OSHA will work to develop its own guidelines on precautions against AIDS and hepatitis B.

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Flying into an ozone hole

Atmospheric scientists will be getting their first close look at the Antarctic ozone "hole" when they fly right through it later this month using two specially equipped airplanes. Those involved in this Airborne Antarctic Ozone Experiment say the experiment will help identify the causes of the dramatic loss of ozone in the stratosphere above Antarctica — an event that has recurred each Antarctic springtime since the mid 1970s (SN: 5/23/87, p.326). Scientists are concerned that this phenomenon might portend the global loss of ozone, which shields life on earth from the sun's harmful ultraviolet radiation.

More than 100 international scientists will convene near the southern tip of South America in Punta Arenas, Chile, to participate in the upcoming program. NASA, which is managing the experiment, plans to fly 10 missions each with an ER-2 and a DC-8 during late August and September. During the same period, the second National Ozone Experiment will study the ozone hole from the ground at McMurdo Station, Antarctica.

The high-altitude ER-2 will fly at about 65,000 feet at the level of maximum ozone loss, and will sample the air as well as directly measure temperatures and the chemical composition of the atmosphere.

At a much lower altitude, the DC-8 will be carrying a flying laboratory complete with instruments and scientists. NASA hopes to exploit the greater range of the DC-8 by using satellite ozone data to guide this plane under the region of greatest ozone depletion, an area that moves daily as the ozone hole continuously shifts over latitudes south of 45°.

The research community is debating two theories to explain the ozone depletions. Some scientists maintain that chemicals, possibly industrially produced fluorocarbons, are destroying the Antarctic ozone, while others believe that natural — and thus unavoidable — dynamic cycles are at the root. This project will seek to resolve the relative importances of chemistry and dynamics over Antarctica, says Robert Watson of NASA headquarters in Washington, D.C.

The participants in the experiment will issue a report on their findings on Oct. 1, three days after the program ends. Although scientists usually require months to analyze data and review each other's work, says Watson, the participants agreed to work collectively in order to expediently inform policymakers who are considering limiting the production of fluorocarbons.

Temperatures rising over Congress

Scientists warned members of Congress last month that humans are altering the climate of the earth faster than they can predict the consequences of these changes. They called for an international commitment to slow these changes and for increased research efforts to understand the climate.

Testifying before both Senate and House subcommittee hearings, scientists discussed rising global temperatures and the global loss of stratospheric ozone. The Senate hearing was called to assess the current state of global climate research while the House is specifically considering whether to fund the National Climate Program, which coordinates research to understand the future of the global climate.

Although scientists are far from a complete understanding of the complex relationships that determine the climate, they believe that increased atmospheric levels of certain gases such as carbon dioxide will ultimately raise global temperatures, as will the destruction of tropical rain forests. New studies suggest that the climate can change quite rapidly, in the space of a few decades.

Many scientists and legislators called for an international year of atmospheric research that would be modeled after the 1957 International Geophysical Year.

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