SIENCE NEWS of the week Pessimistic Outlook in AIDS Reports

This month could be remembered as a bleak but crucial period in the battle against the AIDS virus. As federally printed AIDS pamphlets went in the mail to all U.S. households last week, highlevel committee members were criticizing the government's AIDS policies. While U.S. public health officials met in closed sessions to update the epidemic's expected toll in lives and resources, a new scientific report concluded what researchers long have suspected: Infection with the AIDS virus almost inevitably means death. If a central message emerges at the Fourth International Conference on AIDS in Stockholm next week, it will no doubt repeat what these reports are saying: Prevention through education is still the best available defense.

During a media briefing last week in Washington, D.C., James D. Watkins, chairman of the Presidential Commission on the Human Immunodeficiency Virus (HIV) Epidemic, released a final draft of the commission's report, as well as his own policy recommendations. His major suggestions include federal antidiscrimination laws specifically for HIVpositive individuals, strong confidentiality laws to encourage voluntary testing for HIV infection, notification of sex partners, and "innovative methods of financing care for persons with AIDS" to prevent collapse of an overburdened health care system. Watkins estimates the annual budget for an adequate national effort would exceed \$3 billion.

Calling for a bipartisan response to the epidemic, Watkins says President Reagan should "push the button and get [a revised emergency health care] system rolling." There is, he says, "a passion [to control the disease] in this country waiting for leadership . . . we need somebody in charge of this epidemic." He considers locally run health education, beginning in elementary school, necessary to "get out of the state of ignorance" surrounding the disease. There is overwhelming evidence. Watkins says, that those infected with the virus are being discriminated against in the United States, in terms of employment, housing and health insurance.

Throughout the draft report is "evidence that, for whatever reason, the system has failed," Watkins says. That report, based on testimony to the 13-member commission from more than 550 witnesses heard during 43 days of hearings and site visits, includes nearly 600 recommendations. Its chapters cover such broad topics as vaccine and drug development, patient care, disease prevalence and education. Last week, Watkins emphasized that the final chapter con-

tains his "personal view of what's needed" to halt HIV, but he predicted other commissioners would support his views.

When the full commission met publicly this week, William B. Walsh of Project HOPE in Chevy Chase, Md., said he disagreed with any strong criticism of the present federal effort. But Watkins was generally supported by the group, which met to fine-tune the report. The commissioners left some contentious issues, such as limited mandatory testing and the idea of a national AIDS coordinator, for discussion next week, when they will take a final vote on the report. The group will disband after it presents the report to Reagan June 24.

Although they differ on how clinical trials of potential AIDS drugs should be conducted, the presidential commission and a joint Institute of Medicine (IOM)/National Academy of Sciences (NAS) committee seem to agree on most other issues. For example, both recommend that the diagnosis category called AIDS-related complex (ARC) be discarded, and that public-health attention be widened from the current focus on AIDS to include all stages of HIV infection. Commission members agreed this week to make their comments on this issue even stronger.

The IOM/NAS report, which updates a 1986 statement, joins Watkins in criticizing the federal government's efforts. Committee chairman Theodore Cooper, also chairman of The Upjohn Co. in Kalamazoo, Mich., cites "the gross inadequacy of federal efforts to reduce HIV transmission among intravenous-drug abusers" as an example of the "lack of a coherent program and clear policy." Both reports support expanded drug rehabilitation programs, expressing concern that drug users could become the largest U.S. reservoir of the AIDS virus (SN: 7/25/87, p.60).

Just how many Americans will become infected remains a mystery that health care officials want very much to solve. At a closed meeting last week in Charlottesville, Va., senior health officials heard new estimates of HIV's future effects on the U.S. population. A final report from the meeting is due later this year. According to several accounts, the projections include at least 450,000 cases of AIDS diagnosed by the end of 1993. (To date, roughly 63,000 cases have been reported.)

With an estimated 1 million to 1.5 million infected with HIV in the United States, another report released last week has serious ramifications in terms of health care resources. A mathematical model — constructed by scientists at the

Atlanta-based Centers for Disease Control and the San Francisco Department of Public Health, based on data from 84 homosexual and bisexual men — concludes that the proportion of HIV-infected homosexual men going on to fatal, full-fledged AIDS could be 99 percent or more. Authors of the June 3 SCIENCE article also say the average incubation period between infection and appearance of AIDS in homosexual men is 7.8 years, similar to the 8.2-year estimate reported earlier for transfusion-associated AIDS. — D.D. Edwards with L. Beil

Ranch Hand's dioxin legacy

The Air Force has begun applying a relatively new blood test (SN: 10/4/86, p.212) to search for dioxin-exposure residues in its Ranch Hand study participants. The ongoing Ranch Hand study (SN: 3/3/84, p.132) began in 1982. It is comparing the health of Vietnam veterans who participated in the Operation Ranch Hand defoliation program which used the dioxin-contaminated Agent Orange - against the health of a matched group of air-cargo veterans stationed in Southeast Asia but not Vietnam. Preliminary results, published in the Centers for Disease Control's May 27 Morbidity and Mortality WEEKLY REPORT, show that Ranch Hand workers' blood levels of TCDD - the most toxic dioxin - "differed markedly" from those of the other veterans.

Mean serum levels of dioxin were 49 parts per trillion (ppt) in the Ranch Handers, compared with 5 ppt in the other veterans. Five Ranch Handers had residues in the 200 to 300 ppt range. Since levels of TCDD in blood decrease by half about every seven years, an accompanying editorial note points out, these data indicate "some Ranch Hand personnel had unusually heavy TCDD exposure."

Previously, some researchers had criticized the Ranch Hand study for not collecting some measure of Agent Orange or dioxin exposure from the Vietnam veterans that might be correlated against future appearance of disease. These data now give the Air Force an opportunity to conduct such a crosscheck. However, the preliminary study involved only 150 Ranch Handers and 50 matched controls. Once TCDD blood testing of the study's other 1,860 participants is completed and the data are reviewed by the White House's Agent Orange Working Group, a more detailed report will be issued.

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