knowledge about the number of helper shifts that may have occurred during the two data collection points. In addition, it was not known if the same persons remained in the helper network over time, or if replacements had occurred. From a followup sampling perspective, we also note that the number of informal helpers a frail elder had at baseline was associated with subsequent mortality and institutionalization (table 2). Furthermore, because those who are more functionally dependent at baseline have more helpers, there is less opportunity for change or increase in help. Thus, those remaining in the community at followup are more likely to be less functionally disabled.

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## PUBLIC HEALTH PROGRAMS AND PRACTICES

### Drug Use Occupies Emergency Rooms, Public Opinion Polls

As drug-related hospital emergency room admissions for the first half of 1993 rose 9 percent overall compared with the first half of 1992 (232,800 vs. 214,600), public opinion on drugs ranged from youthful acceptance to a desired shift from law and order emphasis to treatment.

Drug Abuse Warning Network data showed that heroin-related emergencies increased by 44 percent, accounting for more than half the total increase, with the number of cases rising in all adult age groups and among all major racial-ethnic categories. Overall, cocaine-related emergencies showed little change from the 1992 reporting period. PCP-related admissions were up by 45 percent; methamphetamine/speed-related emergencies showed a 61-percent increase; and marijuana-related emergencies increased by 19 percent.

Although these figures reflect large percentage changes, drug-related cases represent only 0.5 percent of total use of emergency rooms nationwide, the report by the Substance Abuse and Mental Health Services Administration (SAMHSA) indicates. At the same time, SAMHSA's 1992 Household Survey on Drug Abuse showed that substantial numbers of Americans, notably young people, believe that using drugs is not harmful.

According to the study, only 54 percent of 12–17-year-olds in 1992 believed that there is great risk associated with trying cocaine once or twice. Only about half (49 percent) of those youths reported that smoking a pack or more of cigarettes per day is associated with great risk of harm. In both cases, youth see less harm associated with drug use than the rest of the population.

Meanwhile, another new national opinion survey found that 7 in 10 Americans see drug abuse as worse than 5 years ago, that government leaders are not doing enough, and that money spent on overseas and border interdiction efforts would be better spent on direct aid to American communities.

The survey of 1,001 randomly selected adults also found most Americans want major changes in the government's "war on drugs," with more spent on prevention and treatment, and less on jails and overseas programs.

These new findings are the result of the most recent poll of attitudes towards drug policy. Responses throughout the survey reflect a loss of support for the government's past "supply side" approach focusing on law enforcement, drug seizures, and crop eradication overseas, and movement towards "demand side" prevention and treatment efforts focused in communities with the greatest drug problems.

The poll was commissioned by Drug Strategies, a nonprofit organization seeking the most effective approaches to drug abuse, and was conducted by Peter D. Hart Research Associates on February 2 and 3, 1994. Drug Strategies is funded by the Carnegie Corporation of New York, the Soros Foundations, and the Edna McConnell Clark Foundation.

Analysis of the new SAMHSA survey data shows that

• among all Americans ages 12 years and older fewer than half (45 percent) reported believing that occasional marijuana use was associated with great risk of harm. This is a decrease from the 50-percent level in 1988.

• 68 percent of Americans reported that trying cocaine once or twice was associated with great risk of harm, down from the 71 percent in 1988.

• 75 percent of Americans reported that trying heroin once or twice was associated with great risk of harm,

little changed from the 1988 figure of 77 percent.

• 64 percent of Americans reported believing that smoking one or more packs of cigarettes per day was associated with great risk of harm, little changed from 62 percent in 1988.

Perceptions of risk associated with use of alcohol were not included in this report.

The new analysis also showed that in 1992, those groups within the population who were least likely to believe that drug use is harmful included young people, men, and whites. People with the highest educational attainment were most likely to perceive great risk in smoking cigarettes, but least likely to perceive great risk in using illicit drugs.

The same survey asked respondents about their perception of the present availability of illegal drugs. Fifty-nine percent of Americans reported that marijuana was easy for them to get, and 40 percent reported that cocaine was easy to get. Both figures represented small decreases from 1991 in the proportion who reported marijuana and cocaine were easy to obtain. In general, the proportion reporting that drugs were easy to get was highest among age groups that have the highest rates of current drug use, 18–25- and 26–34-year-olds.

Findings in this survey are consistent with those of the "Monitoring the Future" survey, conducted by the National Institute on Drug Abuse. In it, young people in the 8th, 10th and 12th grades showed decreasing perceptions of risk from using illegal drugs, and concomitant increases in use of most drugs.

Despite the "three strikes and you're out" tone of the current political dialogue, the Drug Strategies poll discloses that the public prefers a balanced approach, mixing law enforcement, prevention, and treatment. A majority of Americans want criminal sanctions focused on drug dealers, but intensive help for drug users, or those vulnerable to drug abuse.

When asked specifically if they wanted more spent on a range of overseas and border interdiction efforts, a remarkable 74 percent of the respondents instead chose "programs in (their) community for drug education, treatment, prevention, and law enforcement."

In other findings,

When given the choice of what to do about drug users, respondents by almost a two-to-one ratio chose courtsupervised treatment over prison.

Americans differentiate between drug users and drug dealers. While solid majorities favored more treatment and prevention programs for drug users, most Americans are inclined to support prison time for drug dealers.

The poll also indicated majority support (55 percent) for needle exchange programs to reduce the spread of diseases such as AIDS.

Of those respondents who personally knew an addicted person, 71 percent said a supervised treatment program would be more helpful to the addict than prison, which was supported by 15 percent.

To head off and reverse increases in drug use across the country, the Robert Wood Johnson Foundation has awarded a \$7.5 million grant to continue its support to the Partnership for a Drug-Free America, the organization best known for its national anti-drug advertising campaign.

The 3-year grant is to support the Partnership's media campaign, which is designed to reduce demand for illegal drugs through media communication. The focus of the campaign's message is to increase public awareness especially among teenagers—about the dangers of drugs. Additionally, the Partnership assists parents, employers, health care professionals, and community leaders to establish or become actively involved in drug prevention efforts in their community.

#### Experts Predict Vaccine for Cervical Cancer; FDA Warns of Breast Drug

The number of women suffering and dying from cervical cancer will be substantially reduced by health education leading to early detection of the disease, and a vaccine to prevent it is likely to become available early in the next century, experts believe.

At the same time, the Food and Drug Administration has issued a stronger warning that tamoxifen, an anti-cancer drug used in treatment of breast cancer, poses an increased risk of cancer of the uterus.

Despite the increased risks, however, the latest study results have reaffirmed that tamoxifen can delay or prevent relapse in patients who have undergone surgery for breast cancer. Therefore, tamoxifen continues to be indicated for the treatment of breast cancer.

About 900,000 women a year worldwide are at risk of cancer of the cervix, including about 450,000 with diagnosed cases and just as many with early symptoms of the disease. Threequarters of the total are in developing nations. Globally, 300,000 women die from cervical cancer every year, and again, the majority of these deaths occur in poorer countries.

Research leading towards a vaccine that would provide protection against the disease is already under way in a number of countries.

"A cervical cancer vaccine is of tremendous importance—but is still some years away. Meantime, the challenge is to educate and empower millions of women in developing countries to recognize the early warning signals of the disease and to seek medical advice," declared Dr. Jan Stjernsward, Chief of the Cancer and Palliative Care Unit at World Health Organization (WHO) headquarters in Geneva.

Cancer of the cervix is second only to breast cancer in the global incidence of female cancers. Most women are older than age 35 when they are diagnosed, but the disease usually begins to develop at a much younger age. These early symptoms can be accurately detected and successfully treated through national screening programs in which women have a cervical smear test at least once every 5 years.

To be most effective, these programs must be planned in accordance with the principles for national cancer control programs established by WHO in 1984. With such a system, a reduction of at least 60 percent in incidence and mortality from the disease is possible.

The updated tamoxifen warning is based on the drug's package insert that has been revised to reflect the most recent data from large randomized trials. The manufacturer of tamoxifen, Seneca Pharmaceuticals, is sending the updated labeling information in a "Dear Doctor" letter to 380,000 oncologists and health care professionals.

In recent years, researchers have found a strong link between the disease and infection of the cervix by the human papillomavirus that is sexually transmitted and causes genital warts. Research teams are trying to produce a vaccine that neutralizes the virus and would thereby prevent the cancer developing.

In the absence of screening programs in poor countries, and pending the development of a vaccine, WHO is stressing the importance of primary prevention of the disease through health education. This involves advising women about healthy lifestyles, informing them about the early warning signs of cervical cancer, encouraging them to seek medical examinations and treatment, and reassuring them that the disease is curable if detected early enough. The introduction of a relatively simple form of radiation treatment will help solve a lack of therapy resources.

WHO is also helping coordinate an international study that aims to test the feasibility and efficiency of visual inspection of the cervix by nurses and other nonmedical health workers using a simple speculum to detect signs of the disease at an early stage when it is still curable.

A study in Sweden, which has now followed participants for about 9 years, showed that breast cancer patients who take tamoxifen have a higher risk of uterine cancer than had been suggested on the basis of earlier research. In the latest results of this study, 21 of the 1,372 patients randomized to take tamoxifen developed the disease, compared with 4 of the 1,357 patients in the control group. The ongoing B-14 trial of the National Surgical Adjuvant Breast and Bowel Project produced similar results after 6.8 years of followup.

These data, taken together, show that women taking tamoxifen face a risk of uterine cancer about two to three times higher than the risk for women without breast cancer in the general population. Additional studies are under way to define more clearly the role of other risk factors, such as prior hormone use.

Recent unpublished data suggest a possible increase in cancers in the gastrointestinal tract among women receiving tamoxifen. These results are at odds with other trials, and the potential risk is being evaluated. In addition, animal studies continue to support long-held concerns that use of tamoxifen in pregnancy might cause fetal harm and raised the possibility of causing DES-like syndrome. The National Cancer Institute (NCI) emphasizes that the benefits of tamoxifen as a treatment for breast cancer far outweigh the potential risks of other cancers. NCI's current clinical trial to study tamoxifen as a preventive agent is based on evidence that the drug reduces the risk of a new cancer in the other breast. Data also suggest that tamoxifen may decrease cardiovascular disease and stabilize postmenopausal bone loss.

NCI emphasizes, however, that tamoxifen should not be used as a preventive agent outside of a clinical trial.

Tamoxifen is marketed under the trade name Nolvadex by Zeneca Pharmaceuticals, Wilmington, DE.

#### NCI Offers Fellowships in Cancer Prevention

The National Cancer Institute (NCI) is offering an opportunity for persons with doctoral degrees in medicine, dentistry, public health, or philosophy to train in the emerging discipline of cancer prevention and control with its Cancer Prevention Fellowship Program.

The 3-year program provides independent research opportunities within the Division of Cancer Prevention and Control (DCPC) at NCI. Many training opportunities are available, including an academic course covering the current principles, methods, and practice of cancer prevention and control.

A feature of the program is master of public health (MPH) training at accredited schools of public health during the first year for Fellows accepted into the program.

Applications are due September 1, 1994. Fellows begin July 1, 1995.

The program provides for

master of public health training at accredited university programs,
participation in the DCPC Cancer Prevention and Control Academic Course.

• working at NCI directly with individual preceptors on cancer prevention and control projects, and

• field assignments in cancer prevention and control programs at other institutions.

Funding permitting, as many as 10 Fellows will be accepted for up to 3 years of training. Benefits include selected relocation and travel expenses, paid Federal holidays, and participatory health insurance.

Details on the program and an application catalogue may be obtained from Douglas L. Weed, MD, MPH, PhD, Director, Cancer Prevention Fellowship Program, Division of Cancer Prevention and Control, National Cancer Institute, Executive Plaza South, T-41, Bethesda, MD 20892, tel. 301-496-8640 or 8641; FAX 301-402-4863.

#### HHS, Johnson Foundation Fund Programs to Produce More General Physicians

The Department of Health and Human Services (HHS) and the Robert Wood Johnson Foundation are making available in two separate programs a total of \$5 million to encourage medical schools to turn out more general physicians.

To assure access to high quality care at an affordable cost, policymakers recommend that generalists make up approximately 50 percent of the physician supply. Yet in 1993, less than 20 percent of graduating medical students intended to become generalists.

In one program, HHS has awarded \$1.5 million to five medical schools that have agreed to change their curriculums to graduate more primary care generalist physicians.

And, in the second program, 15 medical schools were awarded more than \$3.5 million in grants under the second round of the Robert Wood Johnson Foundation's Generalist Physician Faculty Scholars Program.

The awardees under the HHS Interdisciplinary Generalist Curriculum Project (IGCP) are the University of Colorado School of Medicine, Denver; the University of Nebraska College of Medicine, Omaha; the University of Wisconsin-Madison School of Medicine; the Medical College of Ohio at Toledo; and Eastern Virginia Medical School, Norfolk.

Each of the five medical schools will receive \$100,000 per year for 3 years; during this time, students at the selected schools will be exposed to the new curriculum during or prior to their second year of medical training.

Under the Johnson grants, the 15 selected medical schools each receive up to \$240,000 for 4 years to support

the salary and research costs of one outstanding junior faculty member in family medicine, general pediatrics, or general internal medicine. It is intended that these faculty scholars will serve as role models for medical students considering careers as generalist physicians. Specifically, the grants will allow each scholar to enhance his or her research productivity, develop innovative mentoring programs for medical students, and participate in the design and implementation of initiatives in primary care education .

The 1994 scholars plan to use the research component of their grants to study a wide range of topics including improving communications between physicians and patients, identifying children likely to become obese adults, and easing pain for dying patients. Seven of the scholars are general internists, five are family physicians, and three are general pediatricians.

The opportunity for the five HHSaided schools to demonstrate new methods of educating medical students in primary care is an outgrowth of a project developed by the Primary Care Organizations' Consortium, which is charged with seeking innovative ways to increase the number of medical students who become primary care physicians.

The consortium is an expert advisory panel to its contractor, the Society of Teachers of Family Medicine, Kansas City, MO. In March 1993, the contractor was awarded \$2.8 million to carry out the IGC Project which includes the selection of five schools of medicine as demonstration sites.

The project will include ongoing evaluations to determine what processes must take place in medical schools to make significant changes in student attitudes toward primary care careers. At the five schools, faculty and students will participate in ongoing evaluation processes that will culminate in a national workshop at the end of the 5-year project.

"It is increasingly recognized that the generalist physician is the linchpin for a cost-effective, responsive health care system," said Steven A. Schroeder, MD, President of the Johnson Foundation. "And although academic medical centers have started to recognize this, there is an inadequate number of senior generalist faculty role models that medical students can look to in helping them determine their career choice. The Generalist Physician Faculty Scholars Program is designed to address this problem."

### Second National Primary Care Conference Scheduled for Sept. 11–13 in Dallas

The theme of the Second National Primary Care Conference on September 11–13 in Dallas, TX, will be "Making Primary Care Work Under Health Care Reform."

The 2-day conference of panel discussions and plenary and breakout sessions will be attended by primary care and other health care practitioners, national, State, and local policymakers, health care administrators, researchers, educators, and consumers.

Unlike the First National Primary Care Conference 2 years ago in Washington, DC, that centered on policy related issues, this conference will address very practical issues and questions. It will provide a national forum that focuses on the primary care changes that are already occurring under State health care reform as they relate to primary care systems, workforce issues, and needs of the underserved.

The objective of the conference is to bring together the policy makers and practitioners who are making primary care a critical success factor for health care reform at both the State and national levels. Actual case studies will be discussed with decision makers from health care provider organizations, academic health centers, and both the legislative and executive branches of government. They will describe the workings of primary care in integrated delivery systems in meeting the special needs of underserved people and in reshaping the health care work force.

Cosponsors of the conference include the Department of Health and Human Services' Public Health Service and Health Care Financing Administration, W.K. Kellogg Foundation, Robert Wood Johnson Foundation, Josiah Macy Jr. Foundation, National Academy for State Health Policy, Henry J. Kaiser Family Foundation, and the Pew Charitable Trusts.

Additional information may be obtained from Rose Salton, Social & Scientific Systems, 301-986-4870.

# WHO Announces New TB Control Initiative

The World Health Organization (WHO) has unveiled a three-part strategy to prevent at least 12 million deaths from tuberculosis in the next 10 years.

The plan calls for all countries to adopt WHO's new TB control guidelines, and for wealthy nations to provide an additional \$100 million a year in foreign aid to help the world's poorest countries fight the global epidemic. It also calls on WHO to mobilize a broader global coalition of private businesses, nongovernmental organizations (NGOs), and foundations to help governments fight the disease.

Currently, TB kills nearly 3 million people each year, more adults than any other infectious disease. More than one-third of the world's population is now infected with the TB bacillus and at risk of developing the disease. Strains of TB bacteria resistant to one or more TB drugs are increasing.

The WHO plan details specific actions to be taken by ministries of health, by donors, and by WHO. The first component calls for all governments to adopt and implement WHO's TB control guidelines, which emphasize the importance of curing all infectious cases through the use of supervised short-course chemotherapy. WHO's target is for countries to cure 85 percent of all detected infectious cases. WHO intends to monitor the progress that each country makes toward complying with these guidelines and achieving the target and estimates that already up to 30 percent of all developing countries are now taking steps to move towards the 85-percent cure rate.

The plan's second component calls for each donor government to provide a minimum of 0.2 percent of their foreign aid budgets to help poor countries implement the new TB control guidelines. This contribution would provide an additional \$100 million annually for purchasing basic anti-TB medicines, training health workers with the new guidelines, and enabling the poorest countries to establish and supervise effective control programs.

In the plan's third component, WHO will enlist the support of nongovernmental organizations, private businesses, and foundations to combat TB. According to Arata Kochi, MD, Manager of the WHO TB Program, strong private sector involvement is needed because unlike many concerns, TB does not have a strong public lobby, interest group, or constituency.

"Tuberculosis has not been a primary concern of women's health groups, although it kills as many women as all maternal causes, nor of child survival advocates, even though it kills 300,000 children each year. In some countries TB causes more than a third of AIDS deaths from opportunistic infections. TB should be a primary concern of AIDS advocates," Dr. Kochi added.

WHO will ask for greater private sector involvement to help protect consumers and workers from the TB epidemic. The private sector ultimately can lower costs of doing business and promote a more robust marketplace by helping to ensure that sound public policies for infectious disease control are in place.

"Tuberculosis is a disease of the workforce and consumers," said Dr. Kochi. "Nearly 80 percent of the 8 million people who become sick with TB are in their breadwinning years between ages 15 and 59. The epidemic casts an ominous shadow for economic growth and development. It does not make much sense for private companies to invest millions in new production and marketing strategies in countries where adults are spreading infectious diseases like TB, and not also help to make the modest efforts needed to reduce the risk of these diseases."

If the new TB control initiative is successful, it could reduce TB deaths by almost half in the next 10 years. Annual TB deaths would decrease to 1.6 million, rather than be allowed to increase to nearly 4 million by the year 2004.

# HRSA Issues New Profile of Hill-Burton Program

The Health Resources and Services Administration (HRSA) of the Public Health Service has released an updated report summarizing the Hill-Burton Uncompensated Services Program.

The report provides a legislative and regulatory history of the program and comprehensive data on its operations. The 35-page document also addresses the decreasing number of Hill-Burton facilities and how to use the program's toll-free hotline.

Under the Hill-Burton Hospital Survey and Construction Act, originally passed in 1946, \$4.5 billion in construction grants and \$1.5 billion in loans have been provided to assist in the building of nearly 6,800 hospitals and other health care facilities in 4,000 communities across the nation.

In facilities built or renovated with Hill-Burton funds, there is an obligation to provide a specific dollar amount of free or reduced-cost health services to people who are unable to pay and to admit patients without discrimination. Since the beginning of the Program, Hill-Burton facilities have provided uncompensated care services worth \$34 billion.

A 1992 HRSA demographic study of a sample of Hill-Burton patients showed that

- the mean patient age is 36 years;
- most patients are single, but the median household size is 2.7;
- most patients are white;
- the mean annual household income was \$9,127;
- most patients had no insurance coverage;
- the major treatment mode was outpatient; and
- the most common conditions treated were injury, poisoning, mental disorders, and diseases of the nervous, digestive, and circulatory systems.

A free copy of the report, "A Profile: The Hill-Burton Uncompensated Services Program," may be obtained by telephoning 301-443-5656.

### Health Care Reform Education Campaign Targets 'Generation X'

To bring the health care reform debate to America's young people between the ages of 16 and 24—the so-called Generation X—the Robert Wood Johnson Foundation has awarded a \$2.8 million grant to the Rock the Vote Education Fund.

The grant will support a range of activities designed to encourage young people to become better informed on the nation's health care reform debate and issues concerning their use of the health care system.

"Regardless of what kind of reform

is instituted, the young people of today will bear the brunt of paying for the health care system of tomorrow," commented Foundation Vice President Nancy Kaufman. "America's youth need to be reached with the message that health care reform matters to them and that they need to get involved and engaged by taking responsibility for their own health and the health system."

The educational grant to the Rock the Vote Education Fund will involve three nationally televised specials on youth-oriented networks, a series of public service announcements, and a written health care guide. The televised specials, or Youth Health Care Forums, will consist of a combination of musical performances, video footage, and a town hall meeting, each addressing a different set of health issues of concern to young people.

"Rock the Vote Educational Fund offers a historic opportunity to educate millions of young people who are typically difficult to reach with traditional methods about the kinds of behaviors that injure their own health and drive up the costs to the health care system," Ms. Kaufman added.

In addition to the media activities, the grant will make available a health guide that will outline why young people need to know about the health care system, why reform matters, how young people use the health system, and how they can become more educated consumers. A specially conducted survey will characterize for the first time the opinions and attitudes of Generation X with respect to health care issues and outline how they use the health care system.

#### WHO AIDS Book Describes 'Images of the Epidemic'

A new World Health Organization (WHO) book presents a portrait of the global AIDS epidemic in its multiple public health, social, and human dimensions.

Drawing upon eyewitness accounts as well as data from the WHO Global Program on AIDS, "AIDS: Images of the Epidemic" goes beyond statistical forecasts to show how AIDS affects the lives of real people, why the infection continues to spread, and what can be done to fight back.

By revealing the multiple faces and

facets of the global epidemic, the book aims to improve understanding of the many deep-rooted factors—from prejudice to poverty—that fuel this "catastrophe in slow motion" and complicate efforts to protect people from infection.

While the overall picture is grim, with suffering and despair the dominant images, the book also presents solid evidence of a number of approaches that have proved successful in meeting the dual goals of prevention and compassionate care for those already infected. These successes, supported by what WHO has learned in coordinating the global fight against AIDS, serve as a practical guide to the best use of resources to combat the epidemic, whether at the local or the global level.

The 142-page book has 21 chapters in four parts. Chapters in the first part provide a factual introduction to HIV and AIDS, moving from the detective work that surrounded the first cases to an explanation of the mechanisms by which HIV manages to outwit the immune system. To help dispel persistent myths, an additional chapter provides clear information on how HIV is and is not transmitted, which factors increase the risk of infection, and which preventive measures work.

Combining reported facts with estimates and projections from WHO, chapters in the second part show how the AIDS epidemic, in a multiplicity of different forms, now covers the globe. Profiles of individual countries and groups of countries concentrate on such characteristics as the number of AIDS cases and of people infected with HIV, patterns of transmission, social and cultural factors that hinder prevention and facilitate infection, groups at special risk, and projections for the immediate future.

The global overview concludes with a chapter on the ripple effect of AIDS with alarming data on the magnitude of problems posed by AIDS orphans and by the economic impact of the epidemic, especially in developing countries.

Having established a framework for understanding the global dynamics of the epidemic, the book turns to the question of why AIDS continues to spread. Drawing on first-hand experiences, mainly in Ethiopia, Thailand, the United Republic of Tanzania, and the United Kingdom, chapters provide an in-depth analysis of three key contributing factors: discrimination and denial, poverty, and inequality between the sexes.

Chapters in the final part, again based largely on first-hand experiences in four representative countries, tell the stories of the many people who are meeting the challenges of AIDS with courage, resourcefulness and often remarkable success.

"AIDS: Images of the Epidemic" can be obtained for \$28.80 from WHO Publications Center USA, 49 Sheridan Ave., Albany, NY 12210.

### WHO Issues Vaccination Requirements for 1994 International Travel

Is a yellow fever vaccination certificate required of people arriving in Asia from Africa or South America? Is there a single cover-all drug that will shield against all types of malaria? Will it help, before travelling to tropical countries, to be vaccinated against cholera? These and other essential public health questions are raised and answered in an annual World Health Organization's (WHO) publication "International Travel and Health: Vaccination Requirements and Health Advice."

This guide, updated annually, contains authoritative advice on the medical and personal precautions needed to protect the health of international travelers. Addressed to physicians, tourist agencies, airlines, and shipping companies, the book presents the latest information on general precautions to be taken by all travelers, health risks specific to different geographic areas, vaccinations recommended or advised by WHO, and vaccinations legally required for entry into each of the world's countries.

A yellow fever vaccination certificate is now the only certificate officially required in international travel, and then only for a limited number of travelers. The guide warns, however, that "some countries require a certificate from all entering travelers, including those in transit.

Although there is no epidemiologic justification for this latter requirement, which is clearly in excess of the International Health Regulations, travelers may find it is strictly enforced, particularly for people arriving in Asia from Africa or South America. The period of validity of an international certificate of vaccination against yellow fever is 10 years, beginning 10 days after vaccination.

WHO recommends immunization of HIV-infected persons traveling to yellow fever endemic countries. The recommendation covers primarily HIVseropositive people who are asymptomatic. According to the guide, "There is insufficient evidence to permit a definitive statement on whether administration of yellow fever vaccine poses a risk for symptomatic HIVinfected persons, and the issue is currently under investigation. Any adverse reaction to yellow fever vaccine occurring in HIV-positive individuals should be reported to WHO."

The International Certificate of Vaccination no longer provides a specific space for indication of cholera vaccination. The guide explains that "the protection conferred by currently available cholera vaccines is incomplete, unreliable and of short duration. Vaccination is therefore not recommended as a means of personal protection against cholera. Moreover, there is no evidence that currently available vaccines decrease the quantity of *Vibrio cholerae* excreted by people with asymptomatic infection or chronic carriers."

The guide provides a detailed checklist for prescribers, including drugs for prophylaxis and treatment of malaria. It also contains a list of recommendations to pregnant women and to the parents of young children as well as to those who intend to stay in a malarious area for more than a month.

Copies of "International Travel and Health: Vaccination Requirements and Health Advice" may be obtained from WHO Distribution and Sales, CH 1211, Geneva 27, Switzerland; tel. 41-22-791-2476: FAX 41-22-788-0401.