FOIA Number: 2018-0756-F

FOIA MARKER

This is not a textual record. This is used as an administrative marker by the William J. Clinton Presidential Library Staff.

Collection/Record Group: Clinton Presidential Records

Subgroup/Office of Origin: National AIDS Policy Office

Series/Staff Member: Kristine Gebbie

Subseries:

OA/ID Number: 3772

FolderID:

Folder Title:
Southern States Epidemiologists, November 15, 1993

Stack:	Row:	Section:	Shelf:	Position:
S	66	5	5	3

PARTICIPANTS
SOUTHERN STATE EPIDEMIOLOGISTS MEETING
November 15-17, 1993
Charleston, South Carolina

ALABAMA

Charles H. Woernle, MD, MPH
Assistant State Health Officer for Disease Control
and Prevention
Alabama State Department of Public Health
434 Monroe Street
Montgomery, AL 36130-1701
Telephone: (205) 613-5325 Fax: (205) 288-5021

ARKANSAS

J. P. Lofgren, MD
Medical Epidemiologist
Arkansas Department of Health
4815 W. Markham St.
Little Rock, AR 72205-3867
Telephone: (501) 661-2795 Fax: (501) 661-2082

DISTRICT OF COLUMBIA

Rochelle M. Boddie, RN, MSN
Nurse Epidemiologist
Commission of Public Health
1660 L St. NW, Suite 815
Washington, D.C. 20036
Telephone: (202) 673-6756 Fax: (202) 724-4409

Martin E. Levy, MD, MPH
District Epidemiologist
Commission of Public Health
1660 L St. NW, Suite 815
Washington, D.C. 20036
Telephone: (202) 673-6756 Fax: (202) 724-4409

FLORIDA

Richard S. Hopkins, MD, MSPH
State Epidemiologist
Florida Department of Health and
Rehabilitative Services
1317 Winewood Boulevard
Building 2
Tallahassee, FL 32399-0700
Telephone: (904) 488-2905 Fax: (904) 922-9299

Robert C. Mullen, MPH
Assistant State Epidemiologist
Florida Department of Health and
Rehabilitative Services
1317 Winewood Boulevard
Building 2
Tallahassee, FL 32399-0700
Telephone: (904) 488-2905 Fax: (904) 922-9299

GEORGIA

Chris Harvey
Epidemiolgist
Georgia Department of Human Resources
Division of Public Health
2 Peachtree St., N.W.
Suite 6-110-P
Atlanta, GA 30303
Telephone: (404) 657-2588 Fax: (404) 657-2586

Kathleen Toomey, MD, MPH
State Epidemiologist
Director, Division of Public Health
Georgia Department of Human Resources
2 Peachtree St., N.W.
Suite 6-110-P
Atlanta, GA 30303
Telephone: (404) 657-2588 Fax: (404) 657-2586

Linda Webster, Ph.D.
Epidemiolgist
Georgia Department of Human Resources
Division of Public Health
2 Peachtree St., N.W.
Suite 6-110-P
Atlanta, GA 30303
Telephone: (404) 657-2588 Fax: (404) 657-2586

KENTUCKY

Clarkson T. Palmer, MD,MPH
Manager, Communicable Disease Branch
Division of Epidemiology
Kentucky Department for Health Services
275 East Main Street
Frankfurt, KY 40621
Telephone: (502) 564-4478 Fax: (502) 564-6533

Margaret Stapleton, MSPH
Medical Epidemiologist
Division of Epidemiology
Kentucky Department for Health Services
275 East Main Street
Frankfurt, KY 40621
Telephone: (502) 564-7243 Fax: (502) 564-6533

LOUISIANA

Tom Farley, MD
Medical Epidemiologist
Louisiana Department of Health & Hospital
Office of Public Health
PO Box 60630
New Orleans, LA 70160
Telephone: (504) 568-5005 Fax: (504) 568-3206

Mel Kohn, MD
Medical Epidemiologist
Epidemic Intelligence Service Officer
Louisiana Department of Health & Hospital
Office of Public Health
PO Box 60630
New Orleans, LA 70160
Telephone: (504) 568-5005 Fax: (504) 568-3206

Louise McFarland, Dr.PH
State Epidemiologist
Louisiana Department of Health & Hospital
Office of Public Health
PO Box 60630
New Orleans, LA 70160
Telephone: (504) 568-5005 Fax: (504) 568-3206

MARYLAND

Ebenezer Israel, MD, MPH
State Epidemiologist
Maryland Department of Health
and Mental Hygiene
201 W. Preston St.
Baltimore, MD 21201
Telephone: (410) 225-6700 Fax: (410) 669-4215

MISSISSIPPI

Bruce Brackin
Deputy State Epidemiologist
Mississippi State Department of Health
P.O. Box 1700
Jackson, MS 39215-1700
Telephone: (601) 960-7725 Fax: (601) 960-7909

Lois Farris
Nurse Epidemiologist
Mississippi State Department of Health
P.O. Box 1700
Jackson, MS 39215-1700
Telephone: (601) 960-7725 Fax: (601) 960-7909

NORTH CAROLINA

Thomas B. Cole,
Chief, Injury Control Section
Division of Epidemiology
North Carolina Department of Environment, Health and Natural Resources
P.O. Box 27687
Raleigh, NC 27611-7687

James A. Jones, MPH
Chief, Communicable Disease Control Section
North Carolina Department of Environment, Health and Natural Resources
P.O. Box 27687
Raleigh, NC 27611-7687
Telephone: (919) 733-3419 Fax: (919) 733-0409

Kathryn B.Kirkland, MD
Epidemic Intelligence Service Officer
North Carolina Department of Environment, Health and Natural Resources
P.O. Box 27687
Raleigh, NC 27611-7687
Telephone: (919) 733-3419 Fax: (919) 733-0409

J. Newton MacCormack, MD
State Epidemiologist
North Carolina Department of Environment, Health and Natural Resources
P.O. Box 27687
Raleigh, NC 27611-7687
Telephone: (919) 733-3421 Fax: (919) 733-0409

Rebecca A. Meriwether, MD
Deputy Chief, Communicable Disease Control Section
North Carolina Department of Environment, Health
and Natural Resources
P.O. Box 27687
Raleigh, NC 27611-7687
Telephone: (919) 733-3419 Fax: (919) 733-0409

OKLAHOMA

Patricia Quinlisk, MD, MPH
State Epidemiolgist
Acute Disease Service
Oklahoma State Department of Health
1000 NE 10th St., Room 609
Oklahoma City, OK 73117-1299
Telephone: (405) 272-3266 Fax: (405) 271-5149

TEXAS

Diane M. Simpson, Ph.D, MD
Associate Commissioner for Disease Control
and Prevention
State Epidemiologist
Texas Department of Health
1100 West 49th St.
Austin, TX 78756
Telephone: (512) 458-7729 Fax: (512) 458-7601

VIRGINIA

Grayson B. Miller, Jr., MD
State Epidemiologist
Virginia Department of Health
P.O. Box 2448
Richmond, VA 23218
Telephone: (804) 786-6029 Fax: (804) 786-1076

WEST VIRGINIA

Loretta E. Haddy, MA, MS
State Epidemiologist
West Virginia Department of Health
and Human Resources
Bureau of Public Health
Division of Surveillance andDisease Control
1422 Washington St., E.
Charleston, WV 25301

Telephone: (304) 558-5358 Fax: (304) 558-6335

Beverly Keener, BSN, MPH
Cancer Surveillance Coordinator
West Virginia Department of Health
and Human Resources
Bureau of Public Health
Division of Surveillance andDisease Control
1422 Washington St., E.
Charleston, WV 25301
Telephone: (304) 558-5358 Fax: (304) 558-6335

SOUTH CAROLINA

Robert T. Ball, Jr., MD
Communicable Disease/HIV Consultant
Bureau of Preventive Health Services
SC Department of Health and Environmental Control
Box 101106
Columbia, SC 29211
Telephone: (803) 737-4040 Fax: (803) 737-4036

Dee C. Breeden, MD, MPH
Acting State Epidemiologist
Chief, Bureau of Preventive Health Services
SC Department of Health and Environmental Control
Box 101106
Columbia, SC 29211
Telephone: (803) 737-4040 Fax: (803) 737-4036

Eric R. Brenner, MD
Medical Epidemiologist
Bureau of Preventive Health Services
SC Department of Health and Environmental Control
Box 101106
Columbia, SC 29211
Telephone: (803) 737-4165 Fax: (803) 737-3979

J. Carroll Chambers, MD
District Health Director
Trident Public Health District
SC Department of Health and Environmental Control
334 Calhoun St.
Charleston, SC 29401
Telephone: (803) 724-5800 Fax: (803) 724-5814

James J. Gibson, MD
Director, Division of Disease Control
and Epidemiology
SC Department of Health and Environmental Control
Box 101106
Columbia, SC 29211
Telephone: (803) 737-4165 Fax: (803) 737-3979

Lynda Kettinger, MPH
Director, Division of AIDS
SC Department of Health and Environmental Control
Box 101106
Columbia, SC 29211
Telephone: (803) 737-4110 Fax: (803) 737-3979

Linda J. Wilson, MD
Epidemic Intelligence Service Officer
Communicable Disease Control
SC Department of Health and Environmental Control
Box 101106
Columbia, SC 29211
Telephone: (803) 737-4165 Fax: (803) 737-3979

SOUTH CAROLINA STAFF:

Christine Phillips, Business Associate
Bureau of Preventive Health Services
SC Department of Health and Environmental Control
Box 101106
Columbia, SC 29211
Telephone: (803) 737-4040 Fax: (803) 737-4036

Sally Somerfeldt, Disease Intervention Specialist
Division of Immunization and Prevention
Bureau of Preventive Health Services
SC Department of Health and Environmental Control
Headquarters: Trident Public Health District
334 Calhoun St.
Charleston, SC 29401
Telephone: (803) 724-5880 Fax: (803) 724-5814

JoAnn Palmer, Past President
South Carolina Public Health Association
Meeting Coordinator
Box 101106
Columbia, SC 29211
(803) 737-4150 Fax: (803) 737-6531

SPEAKERS/GUESTS
SOUTHERN STATE EPIDEMIOLOGISTS MEETING
November 15-17, 1993
Charleston, South Carolina

Sevgi O. Aral, Ph.D
Associate Director for Science
Division of Sexually Transmitted Diseases
and HIV Prevention
National Center for Prevention Services
Centers for Disease Control and Prevention
Atlanta, Georgia

Ruth L. Berkelman, MD
Deputy Director
National Center for Infectious Diseases
Centers for Disease Control and Prevention

Kristine Gebbie, RN, MSN
Director
National AIDS Policy Office
Washington, D.C.

John Horan, MD
Chief, State Branch
Epidemiology Program Office
Centers for Disease Control and Prevention
Atlanta, Georgia

Jeffrey L. Jones, MD, MPH
Medical Epidemiologist
Division of HIV/AIDS
National Center for Infectious Diseases
Centers for Disease Control and Prevention
Atlanta, Georgia

Eugene McCray, MD
Chief, Surveillance Section
Surveillance and Epidemiologic Investigations Branch
Division of Tuberculosis Elimination
National Center for Prevention Services
Centers for Disease Control and Prevention
Atlanta, Georgia

Michael E. St.Louis, MD
Chief, Clinical Epidemiological Branch
Division of Sexually Transmitted Diseases
and HIV Prevention
National Center for Prevention Services
Centers for Disease Control and Prevention
Atlanta, Georgia

Peter M. Strebel
National Immunization Program
Centers for Disease Control and Prevention
Atlanta, Georgia

Please indicate which of the below topics you would like to see on the agenda of the Southern State Epidemiologists, Charleston, SC, November l993

Topics from CSTE, Minnesota, l993

Topic	Score*
E coli 0157:H7	25
Emerging Infectious Diseases	24
Hepatitis A,B,C,D or E Epi/Control	23
STD's	23
Rabies Control	22
TB - Control, Surveillance, MDRTB	22
The STD-HIV-TB Connection	22
Immunization Initiatives -(A) Statewide Tracking	21
Update on Vibrio Vulnificus	21
Communicable Disease Control Consultation by Public Health	20
National Plan for Public Health Surveillance	20
Are we protecting our health care workers from TB?	19
CDC Epidemiology Training	19
Hanta Virus Infections	19
HIV/AIDS (Update, Pediatric, Surveillance, CD4 Surveillance)	19
Immunization	19
Immunization Initiatives -(B) Who's Trying What, What Really Works	19
What is effective HIV post-test counseling?	19
Group C Meningococcus	18
Hepatitis A in HIV Infected Foodworker - When can he go back to work?	18
Immunization Initiatives -(F) What Do We Really Know About Barriers to Imm.	18
Lyme Disease	18
Pertussis "Outbreak" Control - Pertussis in Adults - FA Testing (Does it help?)	18
Role of Prevention in Health Reform	18
STD Issues: Diseases, Infrastructure Money	18
Surveillance Standards	18
Control of Communicable Disease in Day Care	17
Cost effectiveness of HIV Screening (Elisa) in STD, Mat. or Fam. Plng. Clinic?	17
Implications of Vibrio Cholerae 0l39	17
Public Health Orders ("I told you not to do that")	17
Recombivax vs. Engerix - Which is better, cheaper?	17
Syphilis Serology in HIV Infected Patients	17
What To Do When AAP Recommendations Precede or Differ from ACIP	17
Which diseases should be reportable?	17
Do we really need to meet the needs of the HIV infected patient?	16
HB/HIV Infected Health Care Workers - How did we comply with the federal law?	16
Hepatitis B Serology (Quantitative)	16
Isolation/Quarantine (A) TB and MDRTB Patients; (B) Recalcitrant HIV Patients	16
Blood Lead Surveillance	15
Serogroup C Meningococcus -What is the experience of our group?	15
Waterborne Cryptosporidiosis	15
Immunization Initiatives -(C) New Federal Legislation	14

*Interest Level Score: High Interest = 2 pts.; Medium Interest = 1 pt.

Please indicate which of the below topics you would like to see on the agenda of the Southern State Epidemiologists, Charleston, SC, November l993

Topics from CSTE, Minnesota, l993

Topic	Score*
Update on Animal Oral Rabies Vaccine	14
Did Louisiana use a questionnaire to determine which STD patients to test for HIV	13
Environmental Risk Assessment and Management	13
Imported Foods - ("The Next Timebomb" - D.A. Henderson)	13
Pre-exposure Rabies Prophylaxis - A Public or Private Problem?	13
CDC Initiatives	12
Congenital Syphilis - Public Health Surveillance, Tracking, Management	12
CSTE Cooperative Agreements	12
Discussion of OSHA Bloodborne Pathogen Regulation Impact	12
HIV - Anonymous vs. Confidential Testing - Mixed Messages from CDC	12
How "excited" do we get over a report of Typhoid Fever?	12
Immunization Initiatives -(D) Automated Telephone Dialers	12
Infant Health Reviews/Epidemiology	12
Military & V.A. Cooperation with Surveillance	12
Natural Disasters - Public Health Roles and Preparedness	12
Personal Safety of Public Health Employees	12
Public Health Veterinary Issues	12
Anergy Skin Testing in HIV Patients	11
Cytomegalovirus - Management of Health Care Workers	11
Immunization Initiatives -(E) Voice Mail for Hard-to-Reach Patients	11
Impact of CLIA on Public Health	11
International Travel Issues	11
New TB Software for Surveillance	11
Electromagnetic Fields	10
Emergence of Antibiotic Resistant Pneumococcus in US	10
Violence Epidemiology	10
Infectious Disease Committee	9
Race/Ethnicity and Surveillance	9
Restricting pregnant health care workers from working with known HIV patients	9
Birth Defects	8
CDC HIV Prevention Program Review	8
Immunization Initiatives -(G) Others	8
National Association of State & Territorial AIDS Directors (NASTAD)	8
Occupational TB Surveillance	8
Public Health Employee Health - Do we take care of our own?	8
Public Health Laboratories (Information System or Technologies)	8
Transportation and Handling of Human Remains Infected by Disease	8
CDC Assessment Initiative	7
Head Injury Surveillance and Epi	7
Role of Medical Examiners & Coroners in Public Health	6
Occupational Lead Poisoning and Surveillance	5
Occupational Surveillance	4

*Interest Level Score: High Interest = 2 pts.; Medium Interest = 1 pt.

Please indicate which of the below topics you would like to see on the agenda of the Southern State Epidemiologists, Charleston, SC, November l993

Topics from CSTE, Minnesota, l993

Topic	Score*
Dr. Kevorkian - "Dr. Death or Dr. Peace"	3
Carbon Monoxide Poisoning	2
Acute Respiratory Illness Associated withAerosolized Leather Protectors	1
Asthma Surveillance	1
MTBE in Gasoline and Respiratory Illness	1

Other Suggested Topics

MRSA
State Morbidity Reports
State Annual Surveillance Summaries - Use
Agri-Med Program
Pneumococcous in Nursing Homes
Influenza
TB Laws & Regulations
Injury Prevention in the Health Department
Role of Alcohol in E R Trauma Cases
Targeting High - Risk Patients
Injury Surveillance in the Community
Influenza Surveillance

*Interest Level Score: High Interest = 2 pts.; Medium Interest = 1 pt.

Crowded at the Summit: Emergent Infections and the Global Food Chain

JOSHUA LEDERBERG

In 1900, infectious disease was the leading cause of mortality in the United States, accounting for at least 37% of deaths. By 1950, this had been mitigated to 6.8%, and again to 2.8% by 1989, with corresponding improvements in life expectancy. These numbers of course must be taken with a grain of salt, given the eventual preemptive role of infection in chronic illness and many disorders whose infectious etiology is still to be recognized. Further, the relative importance of sanitation, health education, and nutrition, in contrast to medical interventions like immunization and antibiotics, has remained in contentious debate. Regardless, this achievement is trumpeted as the conquest of infectious disease, indeed a glorious tribute to public health and medical science.

In consequence, health research since 1950 has ever more emphasized chronic constitutional afflictions like cancer, cardiovascular disease, and psychiatric disorder to the relative neglect of infection. Environmental anxieties are focused on radiation and chemical toxins rather than arthropod vectors and airborne contagion.

Our complacency over the triumph of the human over the microbial has been shaken by the human immunodeficiency virus (HIV) pandemic. In truth, the majority of the world's population has never been relieved of its load of malaria, tuberculosis, diarrheal disease, and a host of parasitoses. It has taken AIDS to provoke a new look at the threats to human health in the United States from infections recently thought to be conquered.

Joshua Lederberg is a university professor at The Rockefeller University, New York, N.Y., and an editor of the report by the IOM Task Force on Emergent Infections. A slightly different version of this article will appear in the May 1993 issue of Trends in Microbiology.

These concerns were taken up by a recent study of the Institute of Medicine Task Force on Emergent Infections. The resulting report was the product of a broad collective effort which promptly reached unanimity that these threats urgently needed to be brought to public and policy attention. The report's recommendations had to do mainly with (i) the strengthening of disease (especially virus) surveillance systems globally, (ii) wider availability of existing vaccines and the removal of legal disincentives to the development of new ones, (iii) acceleration of the technology to enable vaccines against new strains to be developed on a time scale commensurate with the spread of infection, (iv) vector control, and (v) public education. Perhaps the most important message is that infection knows no national boundaries, and we will pay dearly if we ignore the smoldering of infection anywhere.

No single infectious agent is a unique target of concern. During the committee's deliberations, multiple-drug-resistant tuberculosis emerged as a major public health threat in New York City;

dare one say this was predictable from the time of its first appearance a few years ago in immunocompromised people with AIDS? Historically, the influenza of 1918 to 1919 was the most recent previous pandemic to have a major effect on U.S. mortality statistics. Many believe a recurrence of such a lethal reassortment strain, entering a now-naive human herd, is all but inevitable. At the moment, HIV is evolving towards greater serodiversity (potentially frustrating proposed vaccines) and occasional azidothymidine resistance. But its fundamental biological properties happily have not evolved towards easier spread; to the contrary, there are hints of the appearance of strains with a longer latent period or perhaps associated with very limited pathogenicity. On the other hand, simian virus strains have evolved with aggressive and acute lethality. There is no way to guarantee that the same cannot occur with HIV in the human population, and the potentials for genetic recombination with related lentiviruses have scarcely been thought about. A multitude of other zoonoses foster scary outbreaks and importations of Lassa, Marburg, and Ebola viruses. Changing vector distributions, ill heeded, open the way to a family of encephalitides.

Economic and technical advances confer many defenses against infection. Nevertheless, the sheer increase of the global population, its local density in conurbations, and the scale and ease of rapid transoceanic travel are discontinuities in the human condition that aggravate our vulnerability to emergent infections. Some of these are new genetic variants; many others are diseases all too common in their historic habitats which now have new opportunities to spread. Agricultural and residential encroachments on forested lands augment the risk of human contact with arborviruses and borreliae. Other vectors and pests accompany the movement of people and goods. And microbial populations have their own dynamic of evolutionary change connected with their rapid replication, vast numbers, and inherent instabilities—especially on the part of RNA viruses. That the human species has survived so well is a tribute to its evolution of biological immunity and a modest degree of intelligent self-defense.

The human occupation of planet Earth has left us with a conceit that our species is at the very top of the food chain, predatory on all others, rapidly destroying their habitats, and diminishing the genetic diversity of domesticated species. Carnivores that once terrorized human bands have been all but exterminated. Rodents abound and threaten some food stores, but they can be contained with concrete and warfarin. Our agricultural surpluses are nibbled by insects; but at their worst, swarms of locusts will be regional, not global, pests. Barring genosuicide, the human dominion is challenged only by the pathogenic microbes, the predator for whom we remain the prey.

Our task is then to foresee the future of this coevolutionary relationship, our habitation of earth in company with large cohorts of microbes. We can discern conflicting trends. Within the infected host, the selective pressures favor aggressive growth correlated with lethality. Endogenous somatic cells are also potentially in mutual competition as well, but this competition is tempered by the evolutionary tradition that has resulted in the multicellular organism. The invaders are bereft of that tradition. But the host rapidly destroyed is a Pyrrhic victory for the parasite, so efficient transmissibility from host to host is correlated with delayed mortality. Our most effective parasites have entered into our own genome: every human carries these integrated retroviruses and is hardly aware of them, even of their possible symbiotic benefits.

The future of this relationship is incalculable. At the extreme, the global extermination of our species by disease is hypothetically possible, most likely in concurrence with the stresses of war and famine. But we need not search far for historic precedents of continental decimation of many plant and animal species and once every century or so of the human. At stake is a level of sickness and death manyfold higher than that caused by the highly publicized accidents of industrial pollution. Yet we continue to neglect the most elementary precautions.

We have had one wonderful success in the global eradication of smallpox. More problematically, we might accomplish close to the same with polio and perhaps a few other viral diseases. We certainly cannot aspire to decontaminate the earth with respect to all potential microbial rivals. These heroic projects deserve our attention, but in keeping with renewed vigilance and a stockpile of knowledge and developmental capacity to cope with an unpredictable variety of emergent pathogens.

Our most important need is a well-informed consciousness about these contingencies. Research workers at the front line will add more than any top-down line of command in the generation of new insights. And for operational programs of surveillance and of immunization, the working authorities will do better at designing what is feasible than outside consultants. But none of this will happen without a well-informed, internalized scientific and moral perspective and public understanding and political leadership to allocate the resources needed.

The Conquest of Infectious Diseases: Who Are We Kidding?

Reprinted from ANNALS OF INTERNAL MEDICINE Vol. 119; No. 5, 1 September 1993
Printed in U.S.A.

The 20th century has seen unprecedented scientific progress and so it is ironic that as the century draws to a close, scientists and clinicians must learn to deal with emerging new infectious agents whose existence in human beings was proved only in the past few years (1).

Almost a quarter century ago, the Surgeon General of the United States testified to Congress that it was time to "close the book on infectious diseases" (2). The wide use of effective antibiotics, the potential for universal vaccination for many major childhood illnesses, and success stories, such as the eradication of smallpox in 1977, encouraged the perception that infectious diseases had been conquered.

The stark reality is that infectious diseases are the leading cause of death worldwide (3) and remain a leading cause of illness and death in the United States (4). Human immunodeficiency virus (HIV) infection, pneumonia, and influenza rank among the 10 leading causes of death in the United States. Lyme disease has become the leading vector-borne disease with more than 50 000 cases reported since 1982, many resulting in chronic disability. "Old" diseases such as tuberculosis and measles—long thought to have been under control—have recently re-emerged in the United States.

Our once seemingly invincible array of antimicrobial drugs is declining in effectiveness for many hospital- and community-acquired infections. For a large proportion of *Staphylococcus aureus* isolates, for example, only vancomycin remains effective, and vancomycin resistance has now been reported in enterococci (5) and coagulase-negative staphylococci (6). If the resistance acquired by these organisms spreads to methicillin-resistant *S. aureus*, no effective treatment will remain for this organism. Similarly, resistance to penicillin is increasing among strains of *Streptococcus pneumoniae*, the most common cause of community-acquired pneumonia (7–10). Penicillin resistance is emerging in some geographic areas where resistance to erythromycin, tetracycline, and trimethoprim-sulfamethoxazole already exists; some isolates also have decreased susceptibility to third-generation cephalosporins, including cefotaxime and ceftriaxone (9).

Emerging infections include those diseases whose incidence has increased within the past 20 years or whose incidence threatens to increase in the near future; many factors are contributing to their emergence. Years of complacency have allowed the public health infrastructure for infectious diseases to deteriorate. For example, national surveillance of drug-resistant *Mycobacterium tuberculosis* was discontinued in 1984 and has only recently been reinstituted. Surveillance of food-borne disease is inadequate in most areas of the United States, and many outbreaks go undetected (11).

Demographic and social changes have contributed to the emergence of infectious diseases. Changes in sexual behavior and use of illicit injection drugs have contributed to the rapid spread of HIV. The dramatic increase in the use of child-care centers as women have reentered the workplace in increasing numbers has resulted in a greater risk for infectious disease, not only for children but also for parents and child care staff (12) and may be facilitating the transmission of antibiotic-resistant organisms (13). Widespread use of invasive medical devices has led to an increase in hospital-acquired infections; changes in food production, processing, and distribution can compromise food safety and increase food-borne disease; and use of new products can cause illness or even death, as illustrated by the role of superabsorbent tampons in the toxic shock syndrome.

Changes in land use also affect the emergence of infectious diseases. The emergence of Lyme disease in the eastern United States, for example, coincided with the explosive increase in the deer population as much of the land was reforested and people moved further into suburban areas or explored wilderness areas. Animal rabies increased in the Middle Atlantic states and New England when rabid raccoons were transported from one area of the country to another to replenish hunting stocks (14).

International commerce and travel have become so extensive that the terms "domestic" and "global" are losing their significance in the context of infectious diseases. More than 10 times the number of cases of malaria in U.S. travelers were reported in the United States in 1991 than in 1960 (15). In 1992, more cases of cholera were reported in the United States than in any other year since cholera surveillance began in 1961 (15). In addition, the first documented case of cholera, associated with toxigenic *Vibrio cholerae* 0139, was imported into the United States in 1993, only a few months after the strain was first described in southern Asia (16). Epidemics caused by new influenza strains in other areas of the world, particularly Asia, are often quickly followed by outbreaks caused by similar strains in the United States (17). Exotic diseases can also move quickly around the world: After visiting Nigeria, a 43-year-old mechanical engineer was hospitalized in Chicago with a fulminating febrile illness later diagnosed as

Lassa fever—a viral hemorrhagic fever with a high mortality rate that can be transmitted to health care workers (18).

In addition to new and re-emerging infections, results of research are proving that conditions previously thought not to be infectious do have infectious causes. Infection with specific genotypes of human papillomavirus may be the most important risk factor for the development of invasive cervical cancer (19); *Helicobacter pylori* has a causative role in the development of peptic ulcer disease, and antibiotics reduce the frequency of recurrence of this disease (20); and hepatitis C is a major cause of chronic liver disease (21).

Finally, and probably most importantly, microbes mutate and adapt to changing environments, often with astonishing rapidity. The microbe itself may change; for example, the high rate of mutation necessitates annual reformulation of influenza vaccines and is an obstacle in developing an effective vaccine for HIV. Many microorganisms develop drug resistance in response to selective pressure from exposure to antimicrobial agents.

All of these issues are highlighted in a report published by the Institute of Medicine in October 1992 (22). The report, "Emerging Infections: Microbial Threats to Health in the United States," was written by a committee chaired by Joshua Lederberg and Robert E. Shope. It emphasizes the need for strong national and global systems of disease detection to maintain vigilance against emerging infections; recognizes the need to enhance our diagnostic capacity and to apply biotechnologic advances to infectious disease prevention and control; and identifies development of new vaccines, improvement in antibiotic usage, and enhancement of health-promoting behaviors as critically important for responding to the mounting threats of infectious disease.

How will new and re-emerging infections affect the internist's everyday practice? The emergence and re-emergence of infectious diseases have already had a profound effect, radically changing the spectrum of diseases treated by internists and increasing the infection control procedures in use. Drug resistance has and will continue to pose a challenge to clinicians (23, 24). The need for an accurate diagnosis and for determination of drug susceptibility patterns will require increased dependence on the clinical microbiology laboratory. Physicians need to know drug susceptibility patterns in their geographic area before starting empiric antibiotic therapy. An individual patient may represent a sentinel event indicating a community-wide outbreak, and effective communication is needed between clinicians and public health professionals to determine whether further investigation and public health intervention are needed. A patient with chronic liver disease should be tested for hepatitis C as well as hepatitis B virus infection and, if infected, receive counseling to prevent transmission of the virus to others. Physicians must be aware of the global distribution of infectious diseases to counsel their patients about minimizing the risk for infection while abroad; to provide immunizations and prophylaxis; and to diagnose illnesses in returning travelers.

What new challenges should we expect in the future? The recent history of new and re-emerging infectious diseases teaches us that specific predictions are difficult to make. However, experience suggests that diseases will undergo changes in their clinical manifestations. Diseases will appear in new geographic areas, and microorganisms will continue to evolve. New modes of transmission will be identified and the distribution of disease vectors will change. New disease associations will continue to be established. Such challenges are well illustrated by the recent recognition of hantavirus as a cause of the acute respiratory distress syndrome in the southwestern United States (25). In addition, the increasing number of persons with compromised immune systems (for example, the elderly, HIV-infected persons, organ transplant recipients, and other persons receiving immunosuppressive therapy) favors the emergence of additional opportunistic infections.

Clinicians, microbiologists, and public health professionals must work together to prevent infectious diseases and to detect emerging diseases quickly. Monitoring trends of resistance of both hospital- and community-acquired microorganisms and using appropriate antimicrobial drugs are essential. In consultation with local and state health departments, other federal agencies, and professional organizations, the Centers for Disease Control and Prevention is currently evaluating what strategies will be most useful to meet these challenges. One possibility is for internists to participate in a sentinel network for surveillance of emerging infections. As the authors of the Institute of Medicine report state, "Pathogenic microbes can be resilient, dangerous foes. Although it is impossible to predict their individual emergence in time and place, we can be confident that new microbial diseases will emerge" (22).

Ruth L. Berkelman, MD
James M. Hughes, MD
National Center for Infectious Diseases
Centers for Disease Control and Prevention
Atlanta, GA 30333

Requests for Reprints: Ruth L. Berkelman, MD, National Center for Infectious Diseases, Mailstop C12, Centers for Disease Control and Prevention, Atlanta, GA 30333.

Current Author Addresses: Drs. Berkelman and Hughes: Centers for Disease Control and Prevention, Mailstop C12, Atlanta, GA 30333.

Ann Intern Med. 1993;119:426-428.

References

1. **Broder S.** Pathogenic human retroviruses [Editorial]. N Engl J Med. 1988;318:243-5.
2. **Bloom BR, Murray CJ.** Tuberculosis: commentary on a reemergent killer. Science. 1992;257:1055-64.
3. Global Health Situation and Projections. Geneva: World Health Organization; 1992.
4. **Bennett JV, Holmberg SD, Rogers MF, Solomon SL.** Infectious and parasitic diseases. In: Amler RW, Dull HB; eds. Closing the Gap: The Burden of Unnecessary Illness. New York: Oxford University Press; 1987:102-14.
5. **Leclercq R, Derlot E, Duval J, Courvalin P.** Plasmid-mediated resistance to vancomycin and teicoplanin in *Enterococcus faecium*. N Engl J Med. 1988;319:157-61.
6. **Schwalbe RS, Stapleton JT, Gilligan PH.** Emergence of vancomycin resistance in coagulase-negative staphylococci. N Engl J Med. 1987; 316:927-31.
7. **Appelbaum PC.** Antimicrobial resistance in *Streptococcus pneumoniae*: an overview. Clin Infect Dis. 1992;15:77-83.
8. **Cohen ML.** Epidemiology of drug resistance: implications for a post-antimicrobial era. Science. 1992;257:1050-5.

9. **Sloas MM, Barrett FF, Chesney PJ, English BK, Hill BC, Tenover FC, et al.** Cephalosporin treatment failure in penicillin- and cephalosporin-resistant *Streptococcus pneumoniae* meningitis. Pediatr Infect Dis J. 1992;11:662-6.
10. **Tenover FC, Swenson JM, McDougal LK.** Screening for extended-spectrum cephalosporin resistance in pneumococci [Letter]. Lancet. 1992;340;1420.
11. **MacDonald KL, Osterholm MT.** The emergence of *Escherichia coli* 0157:H7 infection in the United States. JAMA. 1993;269:2264-6.
12. **Thacker SB, Addis DG, Goodman RA, Holloway BR, Spencer HC.** Infectious diseases and injuries in child day care. Opportunities for healthier children. JAMA. 1992;268:1720-6.
13. **Reichler MR, Allphin AA, Breiman RF.** The spread of multiply resistant *Streptococcus pneumoniae* at a day care center in Ohio. J Infect Dis. 1992;166:1346-53.
14. Extension of the raccoon rabies epizootic—United States, 1992. MMWR. 1992;41:661-4.
15. Update: cholera—Western Hemisphere, 1992. MMWR. 1993;42:89-91.
16. Imported cholera associated with a newly described *Vibrio cholerae* 0139 strain—California, 1993. MMWR. 1993;42:501-3.
17. **Marwick C.** Influenza's distant early warning system. JAMA. 1993; 269:1223.
18. **Holmes GP, McCormick JB, Trock SC, Chase RA, Lewis SM, Mason CA, et al.** Lassa fever in the United States. Investigation of a case and new guidelines for management. N Engl J Med. 1990;323: 1120-3.
19. **Schiffman MH.** Recent progress in defining the epidemiology of human papillomavirus infection and cervical neoplasia. J Natl Cancer Inst. 1992;84:394-8.
20. **Hentschel E, Brandstätter G, Dragosics B, Hirschl AM, Nemec H, Schutz K, et al.** Effect of ranitidine and amoxicillin plus metronidazole on the eradication of *Helicobacter pylori* and the recurrence of duodenal ulcer. N Engl J Med. 1993;328:308-12.
21. **Alter MJ, Margolis HS, Krawczynski K, Judson FN, Mares A, Alexander WJ, et al.** The natural history of community-acquired hepatitis C in the United States. N Engl J Med. 1992;327:1899-905.
22. **Lederberg J, Shope RE, Oaks SC Jr., eds.** Emerging Infections: Microbial Threats to Health in the United States. Institute of Medicine. Washington, DC: National Academy Press; 1992.
23. **Levy SB.** Confronting multidrug resistance: a role for each of us. JAMA. 1993;269:1840-2.
24. **Kunin CM.** Resistance to antimicrobial drugs—A worldwide calamity. Ann Intern Med. 1993;118:557-61.
25. Update: hantavirus infection—United States. MMWR. 1993;42: 517-9.

CDC

April 17, 1992 / Vol. 41 / No. 15

MMWR

MORBIDITY AND MORTALITY WEEKLY REPORT

Current Trends

Public Health Uses of HIV-Infection Reports — South Carolina, 1986–1991

In the United States, public health officials use acquired immunodeficiency syndrome (AIDS) surveillance data to monitor trends, manage resources within communities, and identify specific needs of special populations (*1*). In addition to AIDS surveillance, 24 states require confidential reporting by name of HIV-infected persons to the local/state health department (Figure 1). This report summarizes public health uses for HIV-infection report data by one of these states—South Carolina Department of Health and Environmental Control (SCDHEC)—in guiding prevention and treatment programs.

AIDS has been reportable to the SCDHEC since 1982; cases of HIV infection have been reported to SCDHEC since February 1986. SCDHEC uses HIV-infection reports to 1) target health education/risk reduction and early intervention programs; 2) provide counseling, testing, referral, and partner-notification services; 3) offer testing for CD4+ T-lymphocytes and screening for other diseases; 4) expand HIV surveillance data collection; and 5) assist legislators and policy makers in targeting resources. In South Carolina, although 93% of AIDS cases among hospitalized persons have been reported (*2*), the completeness of HIV testing and reporting is not known. As of December 31, 1991, SCDHEC had received 5787 HIV reports and 1599 AIDS reports. Of all reported cases of HIV infection in South Carolina in 1991, 52% were from SCDHEC counseling and testing sites and clinics, and 48% were from other sources.

Targeting Health Education/Risk Reduction and Early Intervention Programs

To identify groups in need of HIV/AIDS services, SCDHEC compared HIV-infection and AIDS reports for the state and the United States by person's sex, race/ethnicity, and HIV-transmission category (Table 1). During 1990, a higher percentage of persons with HIV infection were women and blacks than were persons reported with AIDS. From 1986 through 1990, the proportion of HIV-infection reports (from all sources) for women in South Carolina increased 4.5-fold (from 6% to 27%), while the proportion of health department testing of women increased less than twofold (from 28% to

HIV-Infection Reports — Continued

54%). These data were used to target persons with high-risk behaviors with HIV-prevention messages through peer-directed health education and street outreach programs.

Counseling, Testing, Referral, and Partner-Notification Services

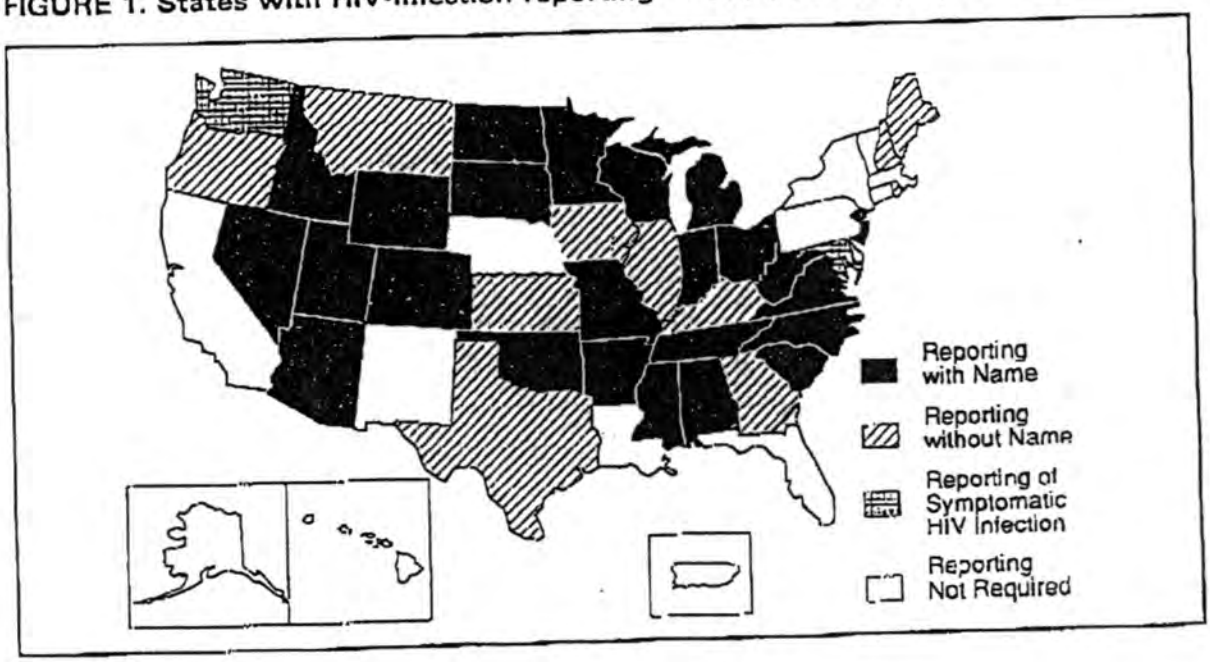
SCDHEC uses HIV-infection reports to target counseling and testing to persons with high-risk behaviors: following each HIV-infection report, either the patient or personal physician is contacted to develop a plan to counsel the infected person and for voluntary partner notification. Without disclosing the identity of the HIV-infected persons, named sex partners and/or persons with whom they shared needles during the previous 3 years are notified and offered counseling and testing. During 1990, of 1235 persons reported with HIV infection, SCDHEC attempted follow-up of 1139 (92%). Staff located 837 (73%) who named 1856 partners (mean: 2.2 partners named per index client); of the 1856 persons, 1336 (72%) were counseled and tested, and 263 (20%) persons with HIV infection were newly identified.

CD4+ T-Lymphocyte Testing and Screening for Other Diseases

Since March 1989, SCDHEC has offered an initial CD4+ T-lymphocyte test free to all persons newly identified as infected with HIV by SCDHEC counseling and testing sites or who were referred by personal physicians. In addition, subsequent CD4+ T-lymphocyte count monitoring is offered free to persons using health department services and for patients who were referred by personal physicians and who lack a source of payment for this test. From March 1989 through August 1991, the SCDHEC performed 4180 CD4+ tests for 2562 persons infected with HIV.

SCDHEC uses CD4+ T-lymphocyte counts to determine the priority of referral of HIV-infected persons to physicians for care and to refer HIV-infected persons to entitlement programs (i.e., state Medicaid AIDS waivers require a CD4+ count <500 cells/μL). Persons are also offered screening for tuberculosis and syphilis, and during

FIGURE 1. States with HIV-infection reporting — United States, April 1992



HIV-Infection Reports — Continued

return visits for follow-up CD4+ T-lymphocyte counts, clients are counseled on risk reduction and behavior changes; clients have reduced high-risk behavior as a result of this counseling (*3*).

From March 1989 through October 1990, SCDHEC evaluated a sample of persons newly identified as infected with HIV who had a CD4+ T-lymphocyte test performed within 90 days of their HIV-antibody–positive test results; of 422 persons, 12% had CD4+ <200 cells/μL, and 46% had <500 cells/μL. These findings were used to assess the need for prophylaxis for *Pneumocystis carinii* pneumonia and zidovudine treatment.

Expanding Surveillance for HIV Infection and AIDS

In collaboration with CDC, SCDHEC is obtaining additional health-related information from persons newly reported with HIV infection or AIDS in urban (Charleston County) and rural (Edisto Health District) areas of the state. Persons who consent to be interviewed provide information about their economic status, access to health care, reproductive history, and detailed sex and drug-use behaviors. Data from this supplemental surveillance are used to improve prevention and treatment services for HIV-infected persons.

TABLE 1. Reported cases of HIV infection and AIDS in South Carolina and of AIDS in the United States, 1990

	HIV*		AIDS			
	South Carolina		South Carolina		United States	
Category	No.	(%)	No.	(%)	No.	(%)
Sex						
Male	906	(73)	319	(81)	38,082	(88)
Female	329	(27)	74	(19)	5,257	(12)
Race†						
Black	877	(71)	234	(60)	13,186	(30)
White	355	(29)	152	(39)	22,342	(52)
Hispanic	3	(<1)	5	(<1)	7,322	(17)
Transmission category						
Men having sex with men	237	(19)	172	(44)	23,738	(55)
Injecting-drug use	115	(9)	83	(21)	10,018	(23)
Heterosexual contact	133	(10)	51	(13)	2,711	(6)
Other	49	(4)	46	(12)	4,252	(10)
Not reported/Unknown§	701	(58)	41	(10)	2,620	(6)
Total¶	**1,235**	**(100)**	**393**	**(100)**	**43,339**	**(100)**

*Persons newly identified with HIV infection in 1990; some HIV-infected persons may have progressed to AIDS in 1990.

†South Carolina has a population of 3.5 million; 69% are white, 30% are black, and <1% are Hispanic. The United States has a population of 248.7 million; 76% are white, 12% are black, 9% are Hispanic, and 3% are in other racial/ethnic groups. In South Carolina, there have been no reports of HIV infection among members of other racial/ethnic groups.

§These HIV-infection data reflect past use of a general morbidity report that did not include information on mode of transmission.

¶Because of incomplete reporting, all subset totals do not add to the column totals.

HIV-Infection Reports — Continued

Assisting Legislators and Policy Makers

SCDHEC uses HIV-infection surveillance data to assist legislators and policy makers in assessing the economic impact of the HIV epidemic and in targeting funds for prevention activities and medical services. For example, for each person newly identified with HIV infection (approximately 100 reported per month) in South Carolina, an estimated $50,000 will be expended for HIV-related health-care costs (*4*). Based on these projections, the partner-notification program during 1990 could result in an estimated cost savings of $13 million if program efforts prevented transmission of HIV to one other person during the lifetime of each of the 263 persons newly identified with HIV infection.

Reported by: L Kettinger, MPH, J Jones, MD, State Epidemiologist, South Carolina Dept of Health and Environmental Control. Div of HIV/AIDS, National Center for Infectious Diseases; National Center for Prevention Svcs, CDC.

Editorial Note: The activities of the SCDHEC illustrate how states can use HIV-infection reports to strengthen efforts to prevent HIV infection and enhance access to services for persons infected with HIV. Although HIV reports may not be representative of all HIV-infected persons, they provide a minimum estimate of those in need of health care and services. The findings in this report (i.e., a higher proportion of HIV infections among women and blacks in South Carolina during 1990) are consistent with trends reported for AIDS cases in South Carolina and HIV seroprevalence and AIDS data for the United States (*5–7*). South Carolina has used these data to target priority geographic areas within the state and direct the funding for education, prevention, and early intervention activities.

Although these activities can occur in the absence of HIV reporting, states with confidential HIV reporting by name can ensure that treatment services are offered to eligible persons with high-risk behaviors. For example, the findings in this report show the effectiveness of targeting counseling and testing to persons at high risk for HIV infection (e.g., named partners of HIV-infected persons); 20% of partners who were counseled and tested were HIV-antibody–positive compared with a 3% seropositive rate among all HIV-antibody tests in South Carolina county health departments in 1990.

Some of the other states that have implemented HIV surveillance use these data in similar ways. For example, in Missouri, approximately 25% of persons infected with HIV who were reported to the health department had been enrolled in a state-funded case-management plan that offers CD4+ testing, a medical evaluation, and zidovudine and other medications. Patients reported by personal physicians are offered care-coordination services and, for those who are eligible, provided insurance co-payments. In Minnesota, all persons reported with HIV infection are offered counseling and partner-notification assistance by the health department; in addition, funding for education and prevention services targeted to adolescents has resulted directly from HIV-report data that demonstrated the need for intervention among this age group. Similarly, in Arizona, services available through the health department to HIV-infected persons include counseling, psychosocial and physician referrals, and zidovudine treatment.

States also use HIV-infection reports in combination with AIDS case reporting and seroprevalence surveys to monitor the epidemic and are collaborating with CDC to develop a standardized HIV surveillance system (*8*). To maintain confidentiality, state health departments have implemented various measures to ensure the security of personal data maintained through HIV/AIDS surveillance (*9*).

HIV-Infection Reports — Continued

For HIV-infected persons who are identified in either public or private health-care settings, HIV reporting provides the opportunity for health departments to offer counseling, medical referrals, and partner-notification and prevention services. Health departments can also use HIV-infection report data to develop public health strategies that link surveillance with prevention and treatment services.

References

1. Public Health Service. Healthy people 2000: national health promotion and disease prevention objectives—full report, with commentary. Washington, DC: US Department of Health and Human Services, Public Health Service, 1991; DHHS publication no. (PHS)91-50212.
2. Jones JL, Rion P, Hermann P, et al. Improvement in AIDS case reporting, South Carolina [letter]. JAMA 1991;265:356.
3. Wykoff RF, Jones JL, Longshore ST, et al. Notification of the sex and needle-sharing partners of individuals with human immunodeficiency virus in rural South Carolina: 30-month experience. Sex Transm Dis 1991;18:217–22
4. Conway GA, Colley-Niemeyer B, Burt S, et al. Costs of AIDS and HIV-related disease in South Carolina: a comprehensive study [abstract]. Vol 2. IV International Conference on AIDS. Stockholm, June 12–16, 1988.
5. CDC. AIDS in women—United States. MMWR 1990;39:845–6.
6. CDC. The HIV/AIDS epidemic: the first 10 years. MMWR 1991;40:357–63,69.
7. St. Louis ME, Conway GA, Hayman CR, et al. Human immunodeficiency virus infection in disadvantaged adolescents. JAMA 1991;266:2387–91.
8. CDC. Update: public health surveillance for HIV infection—United States, 1989 and 1990. MMWR 1990;39:853,859–61.
9. Torres CG, Turner ME, Harkess JR, Istre GR. Security measures for AIDS and HIV. Am J Public Health 1991;81:210–11.

External Cause-of-Injury Coding in Hospital Discharge Data — United States, 1992

Accurate and reliable data regarding the external causes of injury (e.g., motor-vehicle crashes and assaults) are critical for planning, implementing, and evaluating injury-control programs (*1*). In the United States, approximately 25% of the total population is injured annually (*2*), and nonfatal injuries account for one of every 6 hospital days and 10% of all hospital discharges (*3*). Although hospital discharge data (HDD) are an important source of information for severe nonfatal injuries (*4*), external causes of injury have not been routinely reported in HDD, limiting the usefulness of these data for injury surveillance. This report summarizes recent efforts to improve the uniform reporting of external causes of injury in HDD by the National Committee on Vital and Health Statistics (NCVHS) and the National Uniform Billing Committee (NUBC).

NCVHS

The NCVHS is a legislatively mandated advisory committee to the Department of Health and Human Services. In June 1991, the NCVHS approved a report by the NCVHS Subcommittee on Ambulatory and Hospital Care Statistics on the need to include external cause-of-injury codes (E-codes) in HDD (*5*). Key recommendations in the report were: 1) the external cause of injury should be recorded in the medical record whenever an injury is the principal diagnosis or directly related to the principal diagnosis; 2) E-codes should be included in HDD sets; 3) the revised uniform billing

Fax Message

Date: 11/4/93

Number of Pages Including Cover Sheet: (5)

Please Deliver This Fax Message

TO: Steve Lee
Name

Aids Policy Office
Organization/Department

(202) 632-1096 Fax Number ( ) Office Phone

FROM: G. Larry Sandifer, M.P.H., Deputy Bureau Director
Name

Bureau of Preventive Health Services
Bureau/Division/Section

(803) 737-4036 Fax Number (803) 737-4040 Office Phone

SUBJECT/COMMENTS: Dr. Bracken asked me to FAX these to you. I'll call later this morning to confirm receipt.

Thanks

South Carolina Department of Health and Environmental Control

2600 Bull Street
Columbia, SC 29201

DHEC 24-052 (1/91)

South Carolina
DHEC
Department of Health and Environmental Control
Robert Mills Complex, Box 101106
Columbia, SC 29211

November 3, 1993

Kristine M. Gebbie, R.N., M.N.
National AIDS Policy Coordinator
Executive Office of the President
750 17th Street
Suite 1060
Washington, D.C. 20503

Dear Ms. Gebbie:

The State Epidemiologists for the Southern Region are looking forward to your participation in our meeting on November 15th. The meeting will begin at 8:00 a.m. with opening remarks. From 8:30 a.m. to 10:00 a.m. is the session on HIV, with you as the featured speaker/discussant. I suggest that about half of that time be allowed for discussion with the states. The meeting format is informal with about 25 people sitting around the table (perhaps another 20 around the wall). There will be a slide projector, overhead projector, pointer and small PA system available. If you need any other audiovisual support please let me know. If you have any handouts you would like for us to copy and distribute you can FAX them to 803-737-4036 or mail them to me.

As part of your talk, could you provide us an update on health care reform, the functions of your office, and any directions/focus that you see for HIV control? In particular, some clarification would be valuable of the role of the state health departments in the investigation and control of diseases and injuries. In the President's Health Reform Proposal (9/7/93), words like "identification, containment and provision of appropriate emergency and treatment resources for community-wide health problems" leave a lot of room for interpretation. Under the list of professionals to receive training and education, there is no mention of public health nurses, an omission which has fueled much concern.

In the coming reformed system of health care, it is difficult to imagine public health playing a decreased role in protecting people from the diseases from which they cannot or do not protect themselves, such as TB, STD, HIV or environmental toxins and pathogens. A good example would be the treatment of TB; it has always been about as hard to get many physicians to treat TB correctly as it is to get patients to take their medicine correctly. We must have a strong guard against the development of multidrug resistant TB.

Concerning HIV, there is an awareness (or awakening) that controlling STD's is important to reducing the transmission of HIV. I expect this to get considerable attention during the "STD-HIV-TB Connection" segment. It may be the most effective and concrete thing we can do to affect the HIV epidemic.

The present uncertainties in health care reform have left dedicated public health professionals in fear for the future of effective public health prevention programs. While no one knows where all this will end up, just knowing what you think on health care reform will be helpful to us. Your distinguished career in local, state and federal health care provides you with insights that few people have.

We will look forward to an exciting and fruitful discussion on November 15.

Sincerely,

Dee

Dee C. Breeden, M.D., M.P.H., Chief
Bureau of Preventive Health Services
Acting State Epidemiologist

DCB:cp

South Carolina
DHEC
Department of Health and Environmental Control
Robert Mills Complex, Box 101106
Columbia, SC 29211

October 18, 1993

Kristine M. Gebbie, R.N., M.N.
National AIDS Policy Coordinator
Executive Office of the President
750 17th Street
Suite 1060
Washington, D.C. 20503

Dear Ms. Gebbie:

Thank you for accepting to participate in the Annual Southern State Epidemiologists Meeting on the morning of November 15th at the Mills House in Charleston, South Carolina. The public health State Epidemiologists and some of their staff from 15 states will be represented at this meeting (from the District of Columbia, DE, AR, OK, SC, NC, FL, GA, KY, LA, MS, VA, WV, AL, MD, TX, and TN). Also attending the meeting on the 15th will be several participants from CDC who have expertise in HIV, STD and/or TB.

The format of the meeting is very much a sharing of information around a large table with some rather brief presentations by outside experts. I have scheduled you to present and participate in a roundtable discussion on HIV (functions of your office, national direction for HIV, any specific issues from you or the states). If you're willing, I would also like for you to address where you think the Administration sees public health under health care reform. Following a break there will be a discussion of the STD-HIV-TB connection which I hope you can participate in along with the CDC and state representatives.

As you know, the State Epidemiologists are probably the most influential people in state health departments for setting direction based on science and gathering information for HIV and other communicable diseases. Your participation is greatly needed to help us help the states address the now and the future of HIV.

I am attaching an agenda for the entire meeting in hopes that you can attend some of the other sessions (Ms. Retina Holmes has informed me that you need to be in Washington that evening). Hotel reservations can be made by calling the Mills House at 1-800-874-9600.

Lill Mood and I are in hopes that you may be able to spend a little of the weekend before the meeting visiting with friends in beautiful Charleston.

If I can assist you in any way, please let me know.

Sincerely,

D C Breeden, M D

Dee C. Breeden, M.D., M.P.H., Chief
Bureau of Preventive Health Services
Acting State Epidemiologist

Dee

DCB:cp

attachment

DRAFT AGENDA

Southern State Epidemiologists Meeting
November 15-17, 1993
Mills House Hotel
Charleston, South Carolina

November 14 -	Registration 6:00-7:00 pm - Hotel Lobby	
November 15 -	8:00	Welcome, Introductions, Agenda Changes
	8:30	HIV - National Direction, Roundtable Discussion Ms. Kristine Gebbie
	10:00	Break
	10:30	STD-HIV-TB Connection - Panel and Roundtable Discussion Ms. Kristine Gebbie - AIDS Policy Office Dr. Mike St. Louis - CDC-STD Prevention Dr. Dixie Snider - NCPS, CDC
	11:30	HIV Surveillance - Dr. Jeff Jones, NCID, CDC
	12:00	Lunch - Speaker
	1:30	STD's - Dr. St. Louis - discussion
	2:30	TB Roundtable (MDRTB, Surveillance, Employee Health) - Dr. Dixie Snider
	3:30	Behavioral Science for STD's - Dr. Sevgi Aral - NCID, CDC
	4:30	Adjourn
November 16 -	8:00	Immunization - Moderator Dr. J.D. Logren (Tracking, Fed & State Legislation, Barriers, what works, etc.
	9:30	Pertussis - Dr. D.C. Breeden, Moderator
	10:00	Break
	10:30	Hepatitis ABCDE - Roundtable
	11:00	General Public Health Topics - discussion (topics from my survey to you)
	12:00	Lunch
	1:30	General Public Health Topics - discussion (topics from my survey to you)
	2:30	Business Meeting
	3:00	Adjourn
November 17 -	8:00	Late Breakers
	9:00	To Be Announced (Possible Emerging Infection)
	10:00	Break
	10:30	Emerging Infection - CDC - discussant to be announced
	12:00	Adjourn - end meeting

Health Reform & HIV

Basic Premise –

everyone enrolled via employer
State organizes purchasing alliances to offer plans
large employers opt out

subsidies for small businesses
poor individuals

plans must have choice –
fee for service option
out of plan coverage

benefit pkg – broad
Rx drugs, home care, substance abuse
addl enabling services

Data systems – enrollees
services – standards from

Quality – outcome based
report card
electronic

PH improvement –
infrastructure building
targeted – HP 2000

Transition issues —

primary care provider
total #
distribution
~~pts~~ enrollee education

system intersection
pts. ⇒ primary care provider
services which are both —
immunization
STD or TB Rx
data collection
pop based assessment vs. plan enrollee-based

HIV — concerns —
enrollment — incarcerated / undocumented
scope of pkg — substance abuse, Rx drugs
system / fragile network
quality — chronic disease model
Oregon data

data systems —

HIV/AIDS

SURVEILLANCE REPORT — Second Quarter Edition

U.S. AIDS cases reported through June 1993 — **Issued July 1993, Vol. 5, No. 2**

Contents

Acquired immunodeficiency syndrome (AIDS) is a specific group of diseases or conditions which are indicative of severe immunosuppression related to infection with the human immunodeficiency virus (HIV).

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
Public Health Service
Centers for Disease Control
and Prevention
National Center for Infectious Diseases
Division of HIV/AIDS
Atlanta, Georgia 30333

CDC
CENTERS FOR DISEASE CONTROL AND PREVENTION

Notice to readers: Table 2 of this quarter's *Report* uses revised Metropolitan Statistical Area (MSA) definitions issued by the Office of Management and Budget in June 1993. These latest MSA definitions retain most of the revisions issued in December 1992. However, the New York City MSA is returned to its pre-December 1992 definition, and the six MSAs in New Jersey which were included as part of the New York City MSA are again defined as separate MSAs. See technical notes for additional information.

The *HIV/AIDS Surveillance Report* is published quarterly by the Division of HIV/AIDS, National Center for Infectious Diseases, Centers for Disease Control and Prevention (CDC), Atlanta, GA 30333. The year-end edition contains additional tables and graphs. All data contained in the *Report* are provisional.

Suggested Citation: Centers for Disease Control and Prevention. *HIV/AIDS Surveillance Report*, 1993;5(no. 2):[inclusive page numbers].

Single copies of the *HIV/AIDS Surveillance Report* are available free from the CDC National AIDS Clearinghouse, P.O. Box 6003, Rockville, MD 20849-6003; telephone 1–800–458–5231. Individuals or organizations can be added to the mailing list by writing to Centers for Disease Control and Prevention, OD/OPS/MASO, 1/B49, Mailstop A-22, Atlanta, GA 30333. Confidential information, referrals, and educational material on AIDS are available from the CDC National AIDS Hotline: 1–800–342–2437, 1–800–344–7432 (Spanish access), and 1–800–243–7889 (TTY, deaf access).

Table 1. AIDS cases and annual rates per 100,000 population, by state, reported July 1991 through June 1992, July 1992 through June 1993;[1] and cumulative totals, by state and age group, through June 1993[2]

State of residence	July 1991–June 1992		July 1992–June 1993		Cumulative totals		
	No.	Rate	No.	Rate	Adults/adolescents	Children <13 years old	Total
Alabama	424	10.4	704	17.0	2,154	43	2,197
Alaska	16	2.8	29	4.9	150	3	153
Arizona	371	9.9	1,138	29.7	2,874	13	2,887
Arkansas	200	8.4	429	17.9	1,160	18	1,178
California	8,448	27.8	15,402	49.7	57,672	344	58,016
Colorado	429	12.7	1,100	31.8	3,337	19	3,356
Connecticut	480	14.6	1,444	43.8	3,980	91	4,071
Delaware	104	15.3	305	44.0	756	7	763
District of Columbia	806	134.7	1,083	183.6	4,812	78	4,890
Florida	5,246	39.5	8,765	64.4	30,073	713	30,786
Georgia	1,653	25.0	2,194	32.4	8,595	85	8,680
Hawaii	166	14.6	204	17.6	1,088	10	1,098
Idaho	39	3.8	69	6.4	194	2	196
Illinois	1,838	15.9	2,851	24.5	9,880	136	10,016
Indiana	379	6.8	768	13.5	2,312	16	2,328
Iowa	86	3.1	192	6.8	550	5	555
Kansas	168	6.7	300	11.9	957	5	962
Kentucky	178	4.8	296	7.9	1,058	13	1,071
Louisiana	864	20.3	1,130	26.4	4,586	62	4,648
Maine	57	4.6	77	6.2	371	2	373
Maryland	1,036	21.3	2,058	41.7	6,580	146	6,726
Massachusetts	858	14.3	1,933	32.3	6,535	122	6,657
Michigan	826	8.8	1,556	16.5	4,587	61	4,648
Minnesota	241	5.4	593	13.2	1,732	12	1,744
Mississippi	225	8.7	399	15.3	1,370	20	1,390
Missouri	706	13.7	1,660	31.9	4,456	31	4,487
Montana	21	2.6	28	3.4	123	1	124
Nebraska	61	3.8	152	9.5	425	4	429
Nevada	249	19.4	541	39.6	1,522	15	1,537
New Hampshire	53	4.8	92	8.4	353	6	359
New Jersey	2,213	28.5	3,482	44.7	16,836	419	17,255
New Mexico	109	7.0	277	17.5	785	2	787
New York	8,061	44.6	14,099	77.8	59,312	1,258	60,570
North Carolina	643	9.5	1,007	14.7	3,521	74	3,595
North Dakota	1	0.2	5	0.8	30	–	30
Ohio	771	7.0	1,156	10.5	4,445	66	4,511
Oklahoma	244	7.7	670	20.9	1,701	15	1,716
Oregon	290	9.9	663	22.1	2,077	9	2,086
Pennsylvania	1,370	11.5	2,122	17.6	8,331	118	8,449
Rhode Island	122	12.1	238	23.7	762	9	771
South Carolina	345	9.7	1,076	29.6	2,609	35	2,644
South Dakota	9	1.3	23	3.2	56	2	58
Tennessee	407	8.2	834	16.6	2,481	24	2,505
Texas	3,184	18.4	6,223	35.1	21,881	210	22,091
Utah	129	7.3	276	15.2	785	18	803
Vermont	22	3.9	29	5.1	133	2	135
Virginia	656	10.4	1,365	21.4	4,340	79	4,419
Washington	520	10.4	1,180	22.8	4,297	18	4,315
West Virginia	70	3.9	71	3.9	339	5	344
Wisconsin	224	4.5	625	12.5	1,562	16	1,578
Wyoming	11	2.4	33	7.1	90	—	90
U.S. total	**45,629**	**18.1**	**82,946**	**32.4**	**300,615**	**4,462**	**305,077**
Guam	2	1.5	2	1.5	13	–	13
Pacific Islands, U.S.	–	–	–	–	2	–	2
Puerto Rico	1,814	51.0	2,535	70.7	9,911	243	10,154
Virgin Islands, U.S.	20	19.5	42	40.8	139	5	144
Total	**47,465**	**18.5**	**85,525**	**32.9**	**310,680**	**4,710**	**315,390**

[1]Includes 6 months of data collected under the 1993 AIDS surveillance case definition for adults and adolescents.
[2]During the second quarter of 1993, CDC received reports of 25,964 cases and 12,313 deaths among adults/adolescents and 230 cases and 159 deaths among children.

Table 2. AIDS cases and annual rates per 100,000 population, by metropolitan area with 500,000 or more population, reported July 1991 through June 1992, July 1992 through June 1993;[1] and cumulative totals, by area and age group, through June 1993

Metropolitan area of residence[2]	July 1991–June 1992		July 1992–June 1993		Cumulative totals		
	No.	Rate	No.	Rate	Adults/ adolescents	Children <13 years old	Total
Akron, Ohio	42	6.3	38	5.7	199	–	199
Albany-Schenectady, N.Y.	97	11.2	194	22.1	615	14	629
Albuquerque, N.M.	67	11.1	169	27.4	461	1	462
Allentown, Pa.	39	6.5	73	12.0	261	4	265
Ann Arbor, Mich.	37	7.4	49	9.7	173	4	177
Atlanta, Ga.	1,186	38.9	1,490	47.4	6,371	41	6,412
Austin, Tex.	264	30.2	505	56.0	1,574	14	1,588
Bakersfield, Calif.	51	9.0	125	21.2	307	3	310
Baltimore, Md.	588	24.4	1,394	57.0	4,104	110	4,214
Baton Rouge, La.	97	18.0	123	22.5	437	4	441
Bergen-Passaic, N.J.	272	21.2	402	31.4	2,103	51	2,154
Birmingham, Ala.	106	12.5	250	29.1	674	11	685
Boston, Mass.	760	13.4	1,707	30.3	5,871	107	5,978
Buffalo, N.Y.	80	6.7	191	16.0	622	7	629
Charleston, S.C.	76	14.5	218	40.4	554	4	558
Charlotte, N.C.	124	10.4	232	19.0	709	9	718
Chicago, Ill.	1,607	21.4	2,500	33.0	8,700	121	8,821
Cincinnati, Ohio	118	7.6	180	11.5	702	10	712
Cleveland, Ohio	237	10.7	354	15.9	1,260	25	1,285
Columbus, Ohio	153	11.2	236	16.9	938	6	944
Dallas, Tex.	776	28.3	1,686	60.2	5,574	24	5,598
Dayton, Ohio	78	8.2	118	12.3	451	8	459
Denver, Colo.	354	21.2	926	54.0	2,767	14	2,781
Detroit, Mich.	631	14.7	1,092	25.4	3,256	45	3,301
El Paso, Tex.	41	6.7	110	17.4	286	1	287
Fort Lauderdale, Fla.	856	66.5	1,080	81.9	4,845	103	4,948
Fort Worth, Tex.	148	10.6	381	26.6	1,254	14	1,268
Fresno, Calif.	80	10.2	153	19.0	464	4	468
Gary, Ind.	40	6.5	77	12.5	228	1	229
Grand Rapids, Mich.	52	5.5	111	11.5	307	2	309
Greensboro, N.C.	133	12.5	147	13.6	598	11	609
Greenville, S.C.	47	5.6	208	24.3	437	2	439
Harrisburg, Pa.	48	8.1	64	10.6	289	6	295
Hartford, Conn.	144	12.8	428	38.0	1,200	18	1,218
Honolulu, Hawaii	119	14.0	166	19.2	826	7	833
Houston, Tex.	1,177	34.2	2,160	60.8	8,537	87	8,624
Indianapolis, Ind.	177	12.6	349	24.4	1,100	5	1,105
Jacksonville, Fla.	309	33.1	813	84.6	1,964	49	2,013
Jersey City, N.J.	365	66.0	421	76.0	2,685	69	2,754
Kansas City, Mo.	291	18.2	738	45.5	2,124	7	2,131
Knoxville, Tenn.	33	5.5	60	9.8	213	2	215
Las Vegas, Nev.	192	20.8	425	42.6	1,176	14	1,190
Little Rock, Ark.	67	12.9	173	33.0	455	8	463
Los Angeles, Calif.	3,072	34.2	5,196	57.1	20,192	142	20,334
Louisville, Ky.	87	9.1	150	15.5	466	8	474
Memphis, Tenn.	153	15.0	334	32.3	883	8	891
Miami, Fla.	1,691	85.5	2,063	102.3	8,777	249	9,026
Middlesex, N.J.	209	20.3	333	32.2	1,447	31	1,478
Milwaukee, Wis.	122	8.4	322	22.1	837	10	847
Minneapolis-Saint Paul, Minn.	207	8.0	530	20.2	1,541	9	1,550
Monmouth-Ocean City, N.J.	122	12.2	339	33.7	1,198	33	1,231
Nashville, Tenn.	125	12.5	228	22.3	765	9	774
Nassau-Suffolk, N.Y.	309	11.8	876	33.3	2,927	63	2,990
New Haven, Conn.	294	18.0	883	54.1	2,440	70	2,510
New Orleans, La.	498	38.5	579	44.4	2,732	35	2,767
New York, N.Y.	6,979	81.6	11,798	137.9	51,112	1,126	52,238
Newark, N.J.	922	50.6	1,283	70.6	6,853	185	7,038
Norfolk, Va.	120	8.2	274	18.4	917	22	939
Oakland, Calif.	571	27.0	1,106	51.6	3,908	26	3,934
Oklahoma City, Okla.	123	12.7	299	30.4	798	1	799

Table 2. AIDS cases and annual rates per 100,000 population, by metropolitan area with 500,000 or more population, reported July 1991 through June 1992, July 1992 through June 1993;[1] and cumulative totals, by area and age group, through June 1993 — Continued

Metropolitan area of residence[2]	July 1991–June 1992		July 1992–June 1993		Cumulative totals		
	No.	Rate	No.	Rate	Adults/ adolescents	Children <13 years old	Total
Omaha, Neb.	42	6.5	115	17.4	308	1	309
Orange County, Calif.	590	24.2	602	24.3	2,642	19	2,661
Orlando, Fla.	357	28.1	850	64.8	2,145	38	2,183
Philadelphia, Pa.	1,044	21.1	1,756	35.4	6,502	85	6,587
Phoenix, Ariz.	280	12.2	809	34.6	2,100	9	2,109
Pittsburgh, Pa.	147	6.1	164	6.8	936	4	940
Portland, Oreg.	235	15.0	615	37.8	1,820	6	1,826
Providence, R.I.	114	12.4	221	24.1	715	8	723
Raleigh-Durham, N.C.	119	13.5	189	20.8	754	18	772
Richmond, Va.	158	17.9	359	40.0	951	13	964
Riverside-San Bernardino, Calif.	399	14.7	901	31.6	2,455	26	2,481
Rochester, N.Y.	91	8.5	205	18.9	684	8	692
Sacramento, Calif.	252	18.2	408	28.4	1,348	14	1,362
Saint Louis, Mo.	376	15.0	783	31.0	2,111	21	2,132
Salt Lake City, Utah	115	10.4	247	21.8	697	13	710
San Antonio, Tex.	234	17.4	330	24.1	1,427	14	1,441
San Diego, Calif.	607	23.8	1,400	53.9	4,588	30	4,618
San Francisco, Calif.	1,986	122.4	3,862	235.3	16,228	26	16,254
San Jose, Calif.	172	11.4	402	26.6	1,365	11	1,376
San Juan, P.R.	1,092	58.8	1,645	87.7	6,316	159	6,475
Sarasota, Fla.	68	13.6	134	26.1	526	12	538
Scranton, Pa.	29	4.5	53	8.2	183	3	186
Seattle, Wash.	366	17.6	904	42.6	3,249	10	3,259
Springfield, Mass.	87	14.5	183	30.5	525	15	540
Stockton, Calif.	37	7.5	78	15.5	264	8	272
Syracuse, N.Y.	59	7.9	143	18.9	448	6	454
Tacoma, Wash.	37	6.1	97	15.5	305	8	313
Tampa-Saint Petersburg, Fla.	516	24.6	1,314	61.6	3,529	52	3,581
Toledo, Ohio	38	6.2	83	13.5	254	5	259
Tucson, Ariz.	68	10.0	256	37.3	585	3	588
Tulsa, Okla.	67	9.3	219	29.7	513	5	518
Ventura, Calif.	66	9.7	119	17.4	352	1	353
Washington, D.C.	1,465	34.1	2,087	47.8	8,627	133	8,760
West Palm Beach, Fla.	444	50.1	837	92.0	2,791	105	2,896
Wichita, Kansas	61	12.4	84	16.8	257	2	259
Wilmington, Del.	76	14.6	231	43.5	561	6	567
Youngstown, Ohio	21	3.5	27	4.5	140	–	140
Metropolitan areas with 500,000 or more population	**39,678**	**25.2**	**71,621**	**44.9**	**264,665**	**3,971**	**268,636**
Metropolitan areas with 50,000 to 500,000 population	**4,969**	**10.8**	**8,946**	**19.1**	**29,476**	**465**	**29,941**
Non-metropolitan areas	**2,616**	**5.0**	**4,629**	**8.7**	**15,343**	**253**	**15,596**
Total[3]	**47,465**	**18.5**	**85,525**	**32.9**	**310,680**	**4,710**	**315,390**

[1]Includes 6 months of data collected under the 1993 AIDS surveillance case definition for adults and adolescents.
[2]Based on Metropolitan Statistical Area definitions revised June 1993. See notice to readers (page 2) and technical notes.
[3]Totals include 1,217 persons whose area of residence is unknown.

Table 3. AIDS cases by age group, exposure category, and sex, reported July 1991 through June 1992, July 1992 through June 1993;[1] and cumulative totals, by age group and exposure category, through June 1993, United States

Adult/ adolescent exposure category	Males		Females		Totals		
	July 1991-June 1992	July 1992-June 1993	July 1991-June 1992	July 1992-June 1993	July 1991-June 1992	July 1992-June 1993	Cumulative total[2]
	No. (%)	No. (%)	No. (%)	No. (%)	No. (%)	No. (%)	No. (%)
Men who have sex with men	25,051 (62)	41,029 (57)	–	–	25,051 (54)	41,029 (48)	172,085 (55)
Injecting drug use	8,742 (22)	16,267 (22)	2,859 (47)	5,685 (46)	11,601 (25)	21,952 (26)	73,610 (24)
Men who have sex with men and inject drugs	2,591 (6)	4,636 (6)	–	–	2,591 (6)	4,636 (5)	19,557 (6)
Hemophilia/coagulation disorder	333 (1)	866 (1)	6 (0)	24 (0)	339 (1)	890 (1)	2,762 (1)
Heterosexual contact:	1,520 (4)	2,991 (4)	2,521 (41)	4,556 (37)	4,041 (9)	7,547 (9)	21,873 (7)
Sex with injecting drug user	*670*	*1,052*	*1,450*	*2,152*	*2,120*	*3,204*	*10,800*
Sex with bisexual male	*–*	*–*	*182*	*338*	*182*	*338*	*1,115*
Sex with person with hemophilia	*4*	*8*	*16*	*50*	*20*	*58*	*172*
Born in Pattern–II[3] country	*296*	*548*	*182*	*282*	*478*	*830*	*3,557*
Sex with person born in Pattern-II country	*19*	*30*	*20*	*29*	*39*	*59*	*261*
Sex with transfusion recipient with HIV infection	*25*	*49*	*49*	*92*	*74*	*141*	*420*
Sex with HIV-infected person, risk not specified	*506*	*1,304*	*622*	*1,613*	*1,128*	*2,917*	*5,548*
Receipt of blood transfusion, blood components, or tissue[4]	411 (1)	651 (1)	263 (4)	456 (4)	674 (1)	1,107 (1)	5,733 (2)
Other/risk not identified[5]	1,926 (5)	5,910 (8)	487 (8)	1,651 (13)	2,413 (5)	7,561 (9)	15,060 (5)
Adult/adolescent subtotal	40,574 (100)	72,350 (100)	6,136 (100)	12.372 (100)	46,710 (100)	84,722 (100)	310,680 (100)
Pediatric (<13 years old) exposure category							
Hemophilia/coagulation disorder	28 (7)	19 (5)	–	2 (1)	28 (4)	21 (3)	202 (4)
Mother with/at risk for HIV infection:	332 (87)	362 (89)	352 (94)	382 (96)	684 (91)	744 (93)	4,121 (87)
Injecting drug use	*122*	*123*	*145*	*129*	*267*	*252*	*1,844*
Sex with injecting drug user	*53*	*54*	*66*	*58*	*119*	*112*	*802*
Sex with bisexual male	*8*	*5*	*10*	*2*	*18*	*7*	*85*
Sex with person with hemophilia	*5*	*1*	*1*	*3*	*6*	*4*	*21*
Born in Pattern-II country	*19*	*21*	*17*	*13*	*36*	*34*	*301*
Sex with person born in Pattern-II country	*3*	*3*	*2*	*2*	*5*	*5*	*23*
Sex with transfusion recipient with HIV infection	*1*	*1*	*3*	*1*	*4*	*2*	*18*
Sex with HIV-infected person, risk not specified	*34*	*38*	*20*	*52*	*54*	*90*	*260*
Receipt of blood transfusion, blood components, or tissue	*10*	*16*	*7*	*9*	*17*	*25*	*93*
Has HIV infection, risk not specified	*77*	*100*	*81*	*113*	*158*	*213*	*674*
Receipt of blood transfusion, blood components, or tissue	17 (4)	15 (4)	12 (3)	7 (2)	29 (4)	22 (3)	321 (7)
Risk not identified	4 (1)	10 (2)	10 (3)	6 (2)	14 (2)	16 (2)	66 (1)
Pediatric subtotal	381 (100)	406 (100)	374 (100)	397 (100)	755 (100)	803 (100)	4,710 (100)
Total	**40,955**	**72,756**	**6,510**	**12,769**	**47,465**	**85,525**	**315,390**

[1]Includes 6 months of data collected under the 1993 AIDS surveillance case definition for adults and adolescents.

[2]Includes 6 persons known to be infected with human immunodeficiency virus type 2 (HIV-2). See *JAMA* 1992;267:2775-9.

[3]See technical notes.

[4]Twenty-three adults/adolescents and 2 children developed AIDS after receiving blood screened negative for HIV antibody. Six additional adults developed AIDS after receiving tissue or organs from HIV-infected donors. Three of the 6 received tissues or organs from a donor who was negative for HIV antibody at the time of donation. See *N Engl J Med* 1992:326:726-32.

[5]"Other" refers to 8 health-care workers who developed AIDS after occupational exposure to HIV-infected blood, as documented by evidence of seroconversion; to 2 patients who developed AIDS after exposure to HIV within the health-care setting, as documented by laboratory studies; to 1 person who acquired HIV infection perinatally and was diagnosed with AIDS after age 13; and to 1 person with intentional self-inoculation of blood from an HIV-infected person. "Risk not identified" refers to persons whose mode of exposure to HIV is unknown. This includes persons under investigation; persons who died, were lost to follow-up, or declined interview; and persons whose mode of exposure to HIV remains unidentified after investigation. See Figure 6.

Table 4. Male adult/adolescent AIDS cases by exposure category and race/ethnicity, reported July 1992 through June 1993,[1] and cumulative totals, through June 1993, United States

Exposure category	White, not Hispanic				Black, not Hispanic				Hispanic			
	July 1992–June 1993		Cumulative total		July 1992–June 1993		Cumulative total		July 1993–June 1993		Cumulative total	
	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)
Men who have sex with men	26,995	(73)	113,368	(78)	8,451	(37)	31,694	(42)	4,999	(42)	19,907	(45)
Injecting drug use	3,630	(10)	11,528	(8)	8,108	(36)	27,115	(36)	4,436	(37)	16,811	(38)
Men who have sex with men and inject drugs	2,631	(7)	11,140	(7)	1,314	(6)	5,448	(7)	637	(5)	2,808	(6)
Hemophilia/coagulation disorder	706	(2)	2,210	(1)	93	(0)	231	(0)	53	(0)	206	(0)
Heterosexual contact:	535	(1)	1,510	(1)	1,911	(8)	5,783	(8)	524	(4)	1,235	(3)
Sex with injecting drug user	*203*		*748*		*658*		*1,974*		*184*		*566*	
Sex with person with hemophilia	*5*		*12*		*1*		*3*		*1*		*3*	
Born in Pattern-II[2] country	*1*		*8*		*545*		*2,444*		–		*11*	
Sex with person born in Pattern-II country	*7*		*51*		*22*		*75*		*1*		*11*	
Sex with transfusion recipient with HIV infection	*20*		*67*		*21*		*45*		*6*		*29*	
Sex with HIV-infected person, risk not specified	*299*		*624*		*664*		*1,242*		*332*		*615*	
Receipt of blood transfusion, blood components, or tissue	414	(1)	2,450	(2)	131	(1)	568	(1)	93	(1)	370	(1)
Risk not identified[3]	1,996	(5)	4,240	(3)	2,614	(12)	4,837	(6)	1,187	(10)	2,597	(6)
Total	**36,907**	**(100)**	**151,446**	**(100)**	**22,622**	**(100)**	**75,676**	**(100)**	**11,929**	**(100)**	**43,934**	**(100)**

Exposure category	Asian/Pacific Islander				American Indian/Alaska Native				Cumulative totals[4]			
	July 1992–June 1993		Cumulative total		July 1992–June 1993		Cumulative total		July 1992–June 1993		Cumulative total	
	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)
Men who have sex with men	356	(71)	1,422	(78)	136	(66)	349	(64)	41,029	(57)	172,085	(63)
Injecting drug use	25	(5)	70	(4)	19	(9)	58	(11)	16,267	(22)	55,698	(20)
Men who have sex with men and inject drugs	18	(4)	51	(3)	32	(16)	93	(17)	4,636	(6)	19,557	(7)
Hemophilia/coagulation disorder	12	(2)	32	(2)	2	(1)	12	(2)	866	(1)	2,697	(1)
Heterosexual contact:	14	(3)	26	(1)	3	(1)	8	(1)	2,991	(4)	8,572	(3)
Sex with injecting drug user	*5*		*11*		*1*		*5*		*1,052*		*3,305*	
Sex with person with hemophilia	–		–		–		–		*8*		*19*	
Born in Pattern-II country	*1*		*3*		–		–		*548*		*2,472*	
Sex with person born in Pattern-II country	–		*1*		–		–		*30*		*138*	
Sex with transfusion recipient with HIV infection	*2*		*2*		–		–		*49*		*144*	
Sex with HIV-infected person, risk not specified	*6*		*9*		*2*		*3*		*1,304*		*2,494*	
Receipt of blood transfusion, blood components, or tissue	12	(2)	69	(4)	1	(0)	4	(1)	651	(1)	3,466	(1)
Risk not identified	67	(13)	145	(8)	13	(6)	24	(4)	5,910	(8)	11,915	(4)
Total	**504**	**(100)**	**1,815**	**(100)**	**206**	**(100)**	**548**	**(100)**	**72,350**	**(100)**	**273,990**	**(100)**

[1]Includes 6 months of data collected under the 1993 AIDS surveillance case definition for adults and adolescents.

[2]See technical notes.

[3]"Risk not identified" refers to persons whose mode of exposure to HIV is unknown. This includes persons under investigation; persons who died, were lost to follow-up, or declined interview; and persons whose mode of exposure to HIV remains unidentified after investigation. See Figure 6.

[4]Includes 571 men whose race/ethnicity is unknown.

Table 5. Female adult/adolescent AIDS cases by exposure category and race/ethnicity, reported July 1992 through June 1993,[1] and cumulative totals, through June 1993, United States

Exposure category	White, not Hispanic				Black, not Hispanic				Hispanic			
	July 1992–June 1993		Cumulative total		July 1992–June 1993		Cumulative total		July 1992–June 1993		Cumulative total	
	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)
Injecting drug use	1,400	(44)	3,995	(43)	3,228	(48)	10,285	(53)	1,017	(43)	3,516	(47)
Hemophilia/coagulation disorder	13	(0)	43	(0)	6	(0)	14	(0)	4	(0)	7	(0)
Heterosexual contact:	1,144	(36)	3,168	(34)	2,370	(35)	6,976	(36)	978	(41)	3,022	(41)
Sex with injecting drug user	*494*		*1,522*		*1,032*		*3,732*		*607*		*2,185*	
Sex with bisexual male	*164*		*571*		*115*		*376*		*45*		*136*	
Sex with person with hemophilia	*39*		*125*		*7*		*18*		*3*		*7*	
Born in Pattern-II[2] country	*1*		*3*		*277*		*1,070*		*3*		*10*	
Sex with person born in Pattern-II country	*4*		*15*		*24*		*104*		*1*		*4*	
Sex with transfusion recipient with HIV infection	*55*		*166*		*17*		*53*		*11*		*45*	
Sex with HIV-infected person, risk not specified	*387*		*766*		*898*		*1,623*		*308*		*635*	
Receipt of blood transfusion, blood components, or tissue	215	(7)	1,347	(14)	142	(2)	528	(3)	82	(3)	326	(4)
Risk not identified[3]	379	(12)	777	(8)	956	(14)	1,741	(9)	295	(12)	580	(8)
Total	**3,151**	**(100)**	**9,330**	**(100)**	**6,702**	**(100)**	**19,544**	**(100)**	**2,376**	**(100)**	**7,451**	**(100)**

Exposure category	Asian/Pacific Islander				American Indian/Alaska Native				Cumulative totals[4]			
	July 1992–June 1993		Cumulative total		July 1992–June 1993		Cumulative total		July 1992–June 1993		Cumulative total	
	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)
Injecting drug use	11	(13)	29	(15)	16	(40)	49	(52)	5,685	(46)	17,912	(49)
Hemophilia/coagulation disorder	1	(1)	1	(1)	–		–		24	(0)	65	(0)
Heterosexual contact:	46	(55)	86	(43)	15	(38)	27	(29)	4,556	(37)	13,301	(36)
Sex with injecting drug user	*9*		*23*		*9*		*18*		*2,152*		*7,495*	
Sex with bisexual male	*11*		*25*		*2*		*4*		*338*		*1,115*	
Sex with person with hemophilia	*–*		*2*		*1*		*1*		*50*		*153*	
Born in Pattern-I country	*1*		*1*		*–*		*–*		*282*		*1,085*	
Sex with person born in Pattern-II country	*–*		*–*		*–*		*–*		*29*		*123*	
Sex with transfusion recipient with HIV infection	*9*		*11*		*–*		*–*		*92*		*276*	
Sex with HIV-infected person, risk not specified	*16*		*24*		*3*		*4*		*1,613*		*3,054*	
Receipt of blood transfusion, blood components, or tissue	14	(17)	55	(28)	3	(8)	8	(9)	456	(4)	2,267	(6)
Risk not identified	11	(13)	29	(15)	6	(15)	10	(11)	1,651	(13)	3,145	(9)
Total	**83**	**(100)**	**200**	**(100)**	**40**	**(100)**	**94**	**(100)**	**12,372**	**(100)**	**36,690**	**(100)**

[1]Includes 6 months of data collected under the 1993 AIDS surveillance case definition for adults and adolescents.

[2]See technical notes.

[3]"Risk not identified" refers to persons whose mode of exposure to HIV is unknown. This includes persons under investigation; persons who died, were lost to follow-up, or declined interview; and persons whose mode of exposure to HIV remains unidentified after investigation. See Figure 6.

[4]Includes 71 women whose race/ethnicity is unknown.

Table 6. Pediatric AIDS cases by exposure category and race/ethnicity, reported July 1992 through June 1993, and cumulative totals, through June 1993, United States

Exposure category	White, not Hispanic				Black, not Hispanic				Hispanic			
	July 1992–June 1993		Cumulative total		July 1992–June 1993		Cumulative total		July 1992–June 1993		Cumulative total	
	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)
Hemophilia/coagulation disorder	13	(10)	138	(15)	2	(0)	26	(1)	5	(3)	34	(3)
Mother with/at risk for HIV infection:	103	(81)	625	(66)	452	(96)	2,435	(95)	180	(93)	1,025	(89)
Injecting drug use	*34*		*277*		*150*		*1,092*		*64*		*461*	
Sex with injecting drug user	*18*		*123*		*59*		*368*		*34*		*305*	
Sex with bisexual male	*5*		*39*		*1*		*27*		*1*		*18*	
Sex with person with hemophilia	*2*		*13*		*1*		*5*		*1*		*3*	
Born in Pattern-II[1] country	–		*3*		*34*		*296*		–		*2*	
Sex with person born in Pattern-II country	–		–		*5*		*21*		–		*1*	
Sex with transfusion recipient with HIV infection	*1*		*6*		–		*4*		*1*		*8*	
Sex with HIV-infected person, risk not specified	*8*		*40*		*51*		*137*		*29*		*77*	
Receipt of blood transfusion, blood components, or tissue	*6*		*28*		*10*		*40*		*9*		*25*	
Has HIV infection, risk not specified	*29*		*96*		*141*		*445*		*41*		*125*	
Receipt of blood transfusion, blood components, or tissue	8	(6)	164	(17)	7	(1)	73	(3)	7	(4)	76	(7)
Risk not identified[2]	3	(2)	15	(2)	11	(2)	40	(2)	2	(1)	11	(1)
Total	**127**	**(100)**	**942**	**(100)**	**472**	**(100)**	**2,574**	**(100)**	**194**	**(100)**	**1,146**	**(100)**

Exposure category	Asian/Pacific Islander				American Indian/Alaska Native				Cumulative totals[3]			
	July 1992–June 1993		Cumulative total		July 1992–June 1993		Cumulative total		July 1992–June 1993		Cumulative total	
	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)
Hemophilia/coagulation disorder	–		3	(14)	1	(33)	1	(7)	21	(3)	202	(4)
Mother with/at risk for HIV infection:	2	(100)	11	(52)	2	(67)	14	(93)	744	(93)	4,121	(87)
Injecting drug use	*1*		*4*		*1*		*6*		*252*		*1,844*	
Sex with injecting drug user	–		*2*		*1*		*2*		*112*		*802*	
Sex with bisexual male	–		*1*		–		–		*7*		*85*	
Sex with person with hemophilia	–		–		–		–		*4*		*21*	
Born in Pattern-II country	–		–		–		–		*34*		*301*	
Sex with person born in Pattern-II country	–		–		–		–		*5*		*23*	
Sex with transfusion recipient with HIV infection	–		–		–		–		*2*		*18*	
Sex with HIV-infected person, risk not specified	*1*		*2*		–		*2*		*90*		*260*	
Receipt of blood transfusion, blood components, or tissue	–		–		–		–		*25*		*93*	
Has HIV infection, risk not specified	–		*2*		–		*4*		*213*		*674*	
Receipt of blood transfusion, blood components, or tissue	–		7	(33)	–		–		22	(3)	321	(7)
Risk not identified	–		–		–		–		16	(2)	66	(1)
Total	**2**	**(100)**	**21**	**(100)**	**3**	**(100)**	**15**	**(100)**	**803**	**(100)**	**4,710**	**(100)**

[1]See technical notes.

[2]"Risk not identified" refers to persons whose mode of exposure to HIV is unknown. This includes persons under investigation; persons who died, were lost to follow-up, or declined interview; and persons whose mode of exposure to HIV remains unidentified after investigation. See Figure 6.

[3]Includes 12 children whose race/ethnicity is unknown.

Table 7. AIDS cases in adolescents and adults under age 25, by sex and exposure category, reported July 1991 through June 1992, July 1992 through June 1993,[1] and cumulative totals through June 1993, United States

	13-19 years old						20-24 years old					
	July 1991–June 1992		July 1992–June 1993		Cumulative total		July 1991–June 1992		July 1992–June 1993		Cumulative total	
Male exposure category	**No.**	**(%)**	**No.**	**(%)**	**No.**	**(%)**	**No.**	**(%)**	**No.**	**(%)**	**No.**	**(%)**
Men who have sex with men	36	(32)	81	(29)	299	(33)	716	(62)	1,291	(60)	6,116	(65)
Injecting drug use	6	(5)	14	(5)	61	(7)	169	(15)	234	(11)	1,166	(12)
Men who have sex with men and inject drugs	5	(4)	5	(2)	42	(5)	110	(10)	185	(9)	995	(11)
Hemophilia/coagulation disorder	54	(47)	147	(52)	409	(45)	37	(3)	131	(6)	352	(4)
Heterosexual contact:	2	(2)	13	(5)	28	(3)	55	(5)	98	(5)	330	(3)
Sex with injecting drug user	–		*6*		*10*		*27*		*33*		*123*	
Sex with person with hemophilia	–		*1*		*1*		–		–		*1*	
Born in Pattern-II[2] country	–		*1*		*8*		*7*		*12*		*92*	
Sex with person born in Pattern-II country	–		–		*1*		–		*1*		*1*	
Sex with transfusion recipient with HIV infection	–		–		–		*2*		*2*		*7*	
Sex with HIV-infected person, risk not specified	*2*		*5*		*8*		*19*		*50*		*106*	
Receipt of blood transfusion, blood components, or tissue	6	(5)	7	(2)	36	(4)	11	(1)	13	(1)	78	(1)
Risk not identified[3]	5	(4)	17	(6)	38	(4)	54	(5)	191	(9)	409	(4)
Male subtotal	114	(100)	284	(100)	913	(100)	1,152	(100)	2,143	(100)	9,446	(100)
Female exposure category												
Injecting drug use	16	(28)	12	(8)	82	(21)	125	(32)	231	(29)	847	(35)
Hemophilia/coagulation disorder	1	(2)	–		4	(0)	–		4	(0)	8	(0)
Heterosexual contact:	29	(51)	93	(65)	208	(54)	206	(54)	401	(50)	1,193	(50)
Sex with injecting drug user	*19*		*34*		*115*		*124*		*196*		*689*	
Sex with bisexual male	*1*		*6*		*10*		*15*		*26*		*99*	
Sex with person with hemophilia	*2*		*1*		*6*		*1*		*7*		*24*	
Born in Pattern-II country	*1*		*5*		*11*		*6*		*8*		*60*	
Sex with person born in Pattern-II country	–		*1*		*2*		*2*		*1*		*12*	
Sex with transfusion recipient with HIV infection	–		*1*		*2*		–		*1*		*6*	
Sex with HIV-infected person, risk not specified	*6*		*45*		*62*		*58*		*162*		*303*	
Receipt of blood transfusion, blood components, or tissue	2	(4)	9	(6)	36	(9)	9	(2)	21	(3)	79	(3)
Risk not identified	9	(16)	30	(21)	58	(15)	45	(12)	145	(18)	267	(11)
Female subtotal	57	(100)	144	(100)	388	(100)	385	(100)	802	(100)	2,394	(100)
Total	**171**		**428**		**1,301**		**1,537**		**2,945**		**11,840**	

[1]Includes 6 months of data collected under the 1993 AIDS surveillance case definition for adults and adolescents.
[2]See technical notes.
[3]"Risk not identified" refers to persons whose mode of exposure to HIV is unknown. This includes persons under investigation; persons who died, were lost to follow-up, or declined interview; and persons whose mode of exposure to HIV remains unidentified after investigation. See Figure 6.

Table 8. AIDS cases by sex, age at diagnosis, and race/ethnicity, reported through June 1993,[1] United States

Males Age at diagnosis (years)	White, not Hispanic		Black, not Hispanic		Hispanic		Asian/Pacific Islander		American Indian/ Alaska Native		Total[2]	
	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)
Under 5	313	(0)	1,117	(1)	466	(1)	8	(0)	8	(1)	1,916	(1)
5-12	242	(0)	178	(0)	143	(0)	6	(0)	1	(0)	570	(0)
13-19	434	(0)	284	(0)	174	(0)	11	(1)	10	(2)	913	(0)
20-24	4,466	(3)	3,051	(4)	1,829	(4)	65	(4)	21	(4)	9,446	(3)
25-29	22,109	(15)	11,251	(15)	7,196	(16)	245	(13)	109	(20)	40,991	(15)
30-34	35,468	(23)	17,682	(23)	10,899	(24)	373	(20)	157	(28)	64,693	(23)
35-39	33,713	(22)	17,928	(23)	9,903	(22)	398	(22)	112	(20)	62,200	(22)
40-44	24,075	(16)	11,980	(16)	6,544	(15)	312	(17)	72	(13)	43,082	(16)
45-49	14,268	(9)	6,232	(8)	3,472	(8)	199	(11)	32	(6)	24,255	(9)
50-54	7,661	(5)	3,466	(5)	1,878	(4)	100	(5)	14	(3)	13,149	(5)
55-59	4,407	(3)	1,942	(3)	1,096	(2)	57	(3)	9	(2)	7,536	(3)
60-64	2,628	(2)	1,066	(1)	546	(1)	19	(1)	9	(2)	4,272	(2)
65 or older	2,217	(1)	794	(1)	397	(1)	36	(2)	3	(1)	3,453	(1)
Male subtotal	152,001	(100)	76,971	(100)	44,543	(100)	1,829	(100)	557	(100)	276,476	(100)
Females **Age at diagnosis (years)**												
Under 5	309	(3)	1,100	(5)	436	(5)	1	(0)	6	(6)	1,859	(5)
5-12	78	(1)	179	(1)	101	(1)	6	(3)	–		365	(1)
13-19	96	(1)	231	(1)	58	(1)	1	(0)	1	(1)	388	(1)
20-24	610	(6)	1,218	(6)	541	(7)	10	(5)	9	(9)	2,394	(6)
25-29	1,712	(18)	3,463	(17)	1,559	(20)	20	(10)	23	(23)	6,786	(17)
30-34	2,196	(23)	5,094	(24)	1,933	(24)	39	(19)	28	(28)	9,308	(24)
35-39	1,707	(18)	4,560	(22)	1,526	(19)	32	(15)	12	(12)	7,855	(20)
40-44	987	(10)	2,514	(12)	879	(11)	37	(18)	9	(9)	4,433	(11)
45-49	526	(5)	1,033	(5)	400	(5)	16	(8)	5	(5)	1,987	(5)
50-54	329	(3)	628	(3)	246	(3)	11	(5)	2	(2)	1,218	(3)
55-59	314	(3)	352	(2)	144	(2)	8	(4)	1	(1)	821	(2)
60-64	239	(2)	218	(1)	81	(1)	11	(5)	3	(3)	552	(1)
65 or older	614	(6)	233	(1)	84	(1)	15	(7)	1	(1)	948	(2)
Female subtotal	9,717	(100)	20,823	(100)	7,988	(100)	207	(100)	100	(100)	38,914	(100)
Total	**161,718**		**97,794**		**52,531**		**2,036**		**657**		**315,390**	

[1]Includes 6 months of data collected under the 1993 AIDS surveillance case definition for adults and adolescents.
[2]Includes 575 males and 79 females whose race/ethnicity is unknown.

Table 9. AIDS cases, case-fatality rates,[1] and deaths, by half-year and age group, through June 1993,[2] United States

Half-year	Adults/adolescents			Children <13 years old		
	Cases diagnosed during interval	Case-fatality rate	Deaths occurring during interval	Cases diagnosed during interval	Case-fatality rate	Deaths occurring during interval
Before 1981	93	79.6	30	7	71.4	1
1981 Jan.–June	98	89.8	37	11	81.8	2
July–Dec.	210	91.4	87	5	100.0	7
1982 Jan.–June	408	92.2	155	14	85.7	8
July–Dec.	707	91.2	289	15	80.0	5
1983 Jan.–June	1,304	93.3	525	33	100.0	13
July–Dec.	1,660	93.1	938	42	90.5	16
1984 Jan.–June	2,575	92.7	1,405	51	84.3	26
July–Dec.	3,410	92.7	1,978	61	86.9	22
1985 Jan.–June	4,955	92.2	2,829	98	76.5	45
July–Dec.	6,372	91.5	3,901	130	81.5	70
1986 Jan.–June	8,400	90.3	5,108	136	82.4	64
July–Dec.	10,030	88.2	6,574	189	70.9	92
1987 Jan.–June	13,069	88.6	7,613	220	71.8	118
July–Dec.	14,535	85.4	8,010	260	67.7	168
1988 Jan.–June	16,771	83.0	9,389	258	64.7	134
July–Dec.	17,342	82.6	10,745	339	59.9	174
1989 Jan.–June	19,925	78.2	12,363	347	59.7	172
July–Dec.	20,201	75.8	14,200	337	54.6	185
1990 Jan.–June	22,200	69.9	14,346	355	51.0	192
July–Dec.	21,705	64.5	15,211	375	41.3	190
1991 Jan.–June	25,008	56.3	15,757	351	40.2	161
July–Dec.	26,415	46.4	17,244	301	32.6	189
1992 Jan.–June	28,933	32.4	16,904	362	30.7	166
July–Dec.	28,090	19.6	16,495	287	24.7	180
1993 Jan.–June	16,111	9.0	9,419	126	16.7	107
Total[3]	**310,680**	**61.7**	**191,824**	**4,710**	**53.3**	**2,510**

[1]Case-fatality rates are calculated for each half-year by date of diagnosis. Each 6-month case-fatality rate is the number of deaths ever reported among cases diagnosed in that period (regardless of the year of death), divided by the number of total cases diagnosed in that period, multiplied by 100. For example, during the interval January through June 1982, AIDS was diagnosed in 408 adults/adolescents. Through June 1993, 376 of these 408 were reported as dead. Therefore, the case fatality rate is 92.2 (376 divided by 408, multiplied by 100). The case-fatality rates shown here may be underestimates because of incomplete reporting of deaths. Reported deaths are not necessarily caused by HIV-related disease.

[2]Includes 6 months of data collected under the 1993 AIDS surveillance case defintion for adults and adolescents.

[3]Case totals include 153 patients whose date of diagnosis is unknown. Death totals include 282 adults/adolescents and 3 children known to have died, but whose dates of death are unknown.

Table 10. AIDS cases by year of diagnosis and definition category, diagnosed through June 1993,[1] United States

Definition category	Period of diagnosis: Before June 1989 No.	(%)	July 1989–June 1990 No.	(%)	July 1990–June 1991 No.	(%)	July 1991–June 1992 No.	(%)	July 1992–June 1993 No.	(%)	Cumulative total[4] No.	(%)
Pre-1987 definition	99,383	(80)	28,311	(66)	28,538	(60)	28,074	(50)	14,883	(33)	199,189	(63)
1987 definition	23,648	(19)	13,158	(31)	15,202	(32)	17,087	(31)	10,504	(24)	79,600	(25)
1993 definition[2]	1,067	(1)	1,618	(4)	3,699	(8)	10,841	(19)	19,224	(43)	36,601	(12)
Severe HIV-related immunosuppression[3]	*766*		*1,353*		*3,118*		*9,740*		*17,812*		*32,846*	
Pulmonary tuberculosis	*263*		*239*		*534*		*955*		*1,013*		*3,099*	
Recurrent pneumonia	*29*		*26*		*43*		*129*		*366*		*593*	
Invasive cervical cancer	*11*		*4*		*8*		*26*		*40*		*89*	
Total	**124,098**	**(100)**	**43,087**	**(100)**	**47,439**	**(100)**	**56,002**	**(100)**	**44,611**	**(100)**	**315,390**	**(100)**

[1]Includes 6 months of data collected under the 1993 AIDS surveillance case definition for adults and adolescents.
[2]Persons who meet only the 1993 AIDS case definition and whose date of diagnosis is before January 1993 were diagnosed retrospectively. The sum of diagnoses listed for the four conditions under the 1993 definition do not equal the 1993 definition total because some persons have more than one diagnosis from the added conditions of pulmonary tuberculosis, recurrent pneumonia, and invasive cervical cancer.
[3]Defined as CD4+ T-lymphocyte count of less than 200 cells/μL or a CD4+ percentage less than 14 in persons with laboratory confirmation of HIV infection.
[4]Totals include 153 patients whose date of diagnosis is unknown.

Table 11. Health-care workers with documented and possible occupationally acquired AIDS/HIV infection, by occupation, reported through June 1993, United States[1]

Occupation	Documented occupational transmission[2] No.	Possible occupational transmission[3] No.
Dental worker, including dentist	–	7
Embalmer/morgue technician	–	3
Emergency medical technician/paramedic	–	7
Health aide/attendant	1	8
Housekeeper/maintenace worker	1	6
Laboratory technician, clinical	14	13
Laboratory technician, nonclinical	1	1
Nurse	13	15
Physician, nonsurgical	4	8
Physician, surgical	–	2
Respiratory therapist	1	1
Technician, dialysis	1	1
Technician, surgical	1	1
Technician/therapist, other than those listed above	–	3
Other health-care occupations	–	2
Total	**37**	**78**

[1]Health-care workers are defined as those persons, including students and trainees, who have worked in a health-care, clinical, or HIV laboratory setting at any time since 1978. See *MMWR* 1992;41:823-5.
[2]Health-care workers who had documented HIV seroconversion after occupational exposure: 32 had percutaneous exposure, 4 had mucocutaneous exposure, 1 had both percutaneous and mucocutaneous exposures. Thirty-four exposures were to blood from an HIV-infected person, 1 to visibly bloody fluid, 1 to an unspecified fluid, and 1 to concentrated virus in a laboratory. Eight of these health-care workers have developed AIDS.
[3]These health-care workers have been investigated and are without identifiable behavioral or transfusion risks; each reported percutaneous or mucocutaneous occupational exposures to blood or body fluids, or laboratory solutions containing HIV, but HIV seroconversion specifically resulting from an occupational exposure was not documented.

Table 12. Adult/adolescent AIDS cases by single and multiple exposure categories, reported through June 1993, United States

Exposure category	AIDS cases No.	AIDS cases (%)
Single mode of exposure		
Men who have sex with men	166,023	(53)
Injecting drug use	62,414	(20)
Hemophilia/coagulation disorder	2,057	(1)
Heterosexual contact	21,133	(7)
Receipt of transfusion[1]	5,727	(2)
Receipt of transplant of tissues/organs[2]	6	(0)
Other[3]	12	(0)
Single mode of exposure subtotal	**257,372**	**(83)**
Multiple modes of exposure		
Men who have sex with men; injecting drug use	17,547	(6)
Men who have sex with men; hemophilia/coagulation disorder	76	(0)
Men who have sex with men; heterosexual contact	3,410	(1)
Men who have sex with men; receipt of transfusion/transplant	2,397	(1)
Injecting drug use; hemophilia/coagulation disorder	79	(0)
Injecting drug use; heterosexual contact	9,619	(3)
Injecting drug use; receipt of transfusion/transplant	1,059	(0)
Hemophilia/coagulation disorder; heterosexual contact	20	(0)
Hemophilia/coagulation disorder; receipt of transfusion/transplant	670	(0)
Heterosexual contact; receipt of transfusion/transplant	740	(0)
Men who have sex with men; injecting drug use; hemophilia/coagulation disorder	18	(0)
Men who have sex with men; injecting drug use; heterosexual contact	1,553	(0)
Men who have sex with men; injecting drug use; receipt of transfusion/transplant	365	(0)
Men who have sex with men; hemophilia/coagulation disorder; heterosexual contact	3	(0)
Men who have sex with men; hemophilia/coagulation disorder; receipt of transfusion/transplant	26	(0)
Men who have sex with men; heterosexual contact; receipt of transfusion/transplant	148	(0)
Injecting drug use; hemophilia/coagulation disorder; heterosexual contact	19	(0)
Injecting drug use; hemophilia/coagulation disorder; receipt of transfusion/transplant	25	(0)
Injecting drug use; heterosexual contact; receipt of transfusion/transplant	387	(0)
Hemophilia/coagulation disorder; heterosexual contact; receipt of transfusion/transplant	15	(0)
Men who have sex with men; injecting drug use; hemophilia/coagulation disorder; heterosexual contact	2	(0)
Men who have sex with men; injecting drug use; hemophilia/coagulation disorder; receipt of transfusion/transplant	5	(0)
Men who have sex with men; injecting drug use; heterosexual contact; receipt of transfusion/transplant	66	(0)
Men who have sex with men; hemophilia/coagulation disorder; heterosexual contact; receipt of transfusion/transplant	2	(0)
Injecting drug use; hemophilia/coagulation disorder; heterosexual contact; receipt of transfusion/transplant	8	(0)
Men who have sex with men; injecting drug use; hemophilia/coagulation disorder; heterosexual contact; receipt of transfusion/transplant	1	(0)
Multiple modes of exposure subtotal	**38,260**	**(12)**
Risk not identified[4]	**15,048**	**(5)**
Total	**310,680**	**(100)**

[1]Includes 23 adult/adolescents who developed AIDS after receiving blood screened negative for HIV antibody.

[2]Six adults developed AIDS after receiving tissue from HIV-infected donors. Three of the 6 received tissue or organs from a donor who was negative for HIV antibody at the time of donation. See *N Engl J Med* 1992;326:726-32.

[3]"Other" refers to 8 health-care workers who developed AIDS after occupational exposure to HIV-infected blood, as documented by evidence of seroconversion; to 2 patients who developed AIDS after exposure to HIV within the health-care setting, as documented by laboratory studies; to 1 person who acquired HIV infection perinatally and was diagnosed with AIDS after age 13; and to 1 person with intentional self-inoculation of blood from an HIV-infected person.

[4]"Risk not identified" refers to persons whose mode of exposure to HIV is unknown. This includes persons under investigation; persons who died, were lost to follow-up, or declined interview; and persons whose mode of exposure to HIV remains unidentified after investigation. See Figure 6.

Figure 1. Male adult/adolescent AIDS annual rates per 100,000 population, for cases reported July 1992 through June 1993, United States

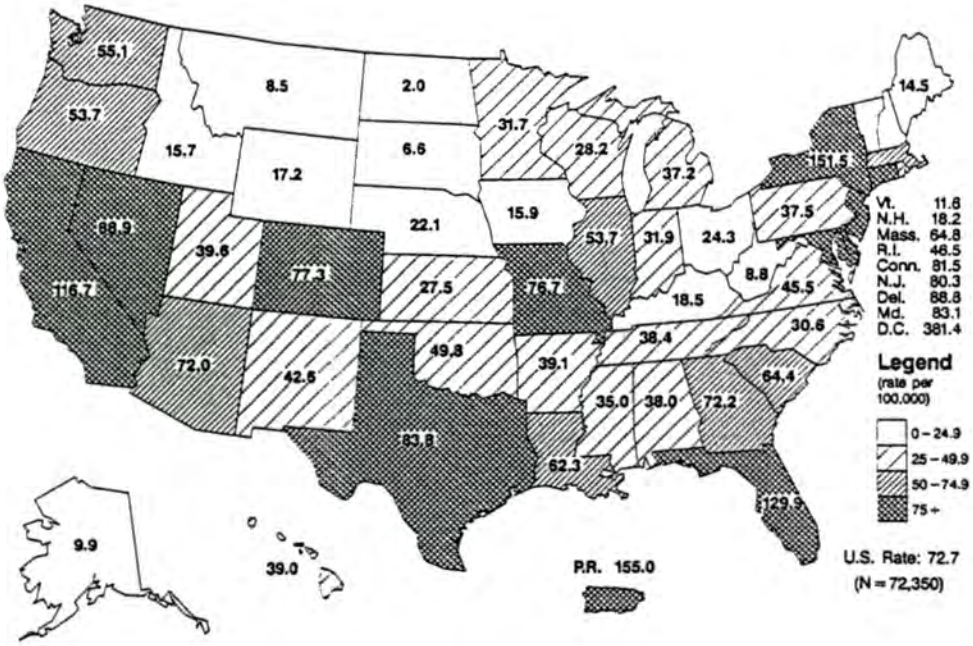


Figure 2. Female adult/adolescent AIDS annual rates per 100,000 population, for cases reported July 1992 through June 1993, United States

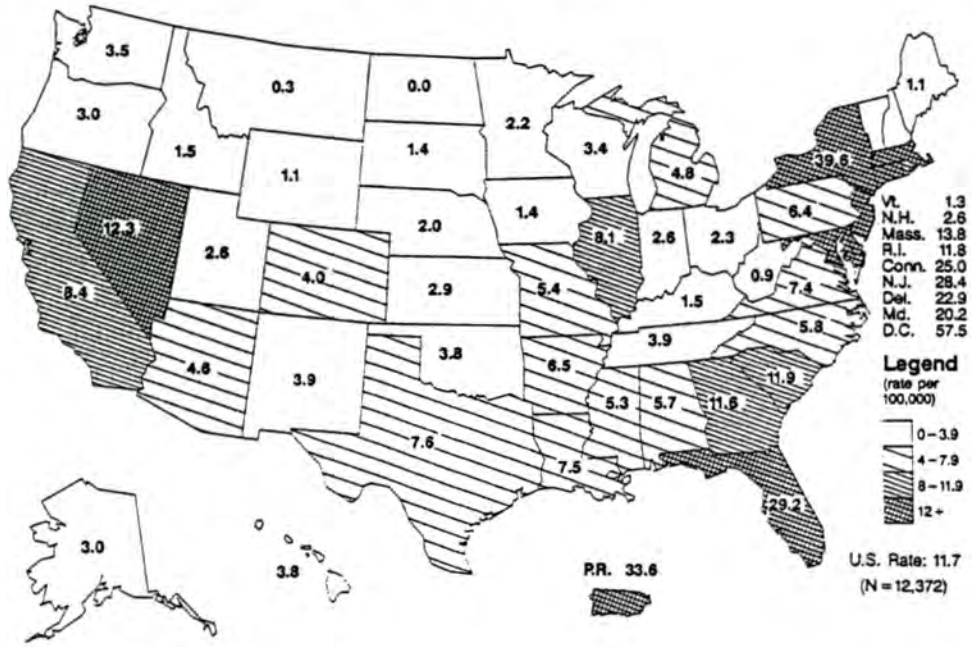
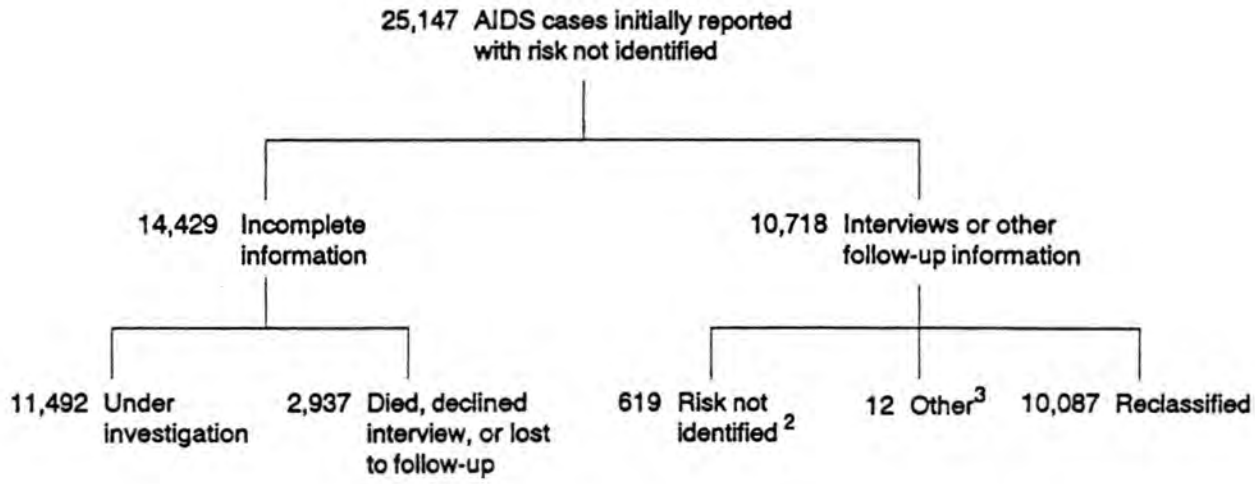


Figure 3. Male adult/adolescent AIDS cases reported July 1992 through June 1993, United States

Figure 4. Female adult/adolescent AIDS cases reported July 1992 through June 1993, United States

Figure 5. Pediatric AIDS cases reported July 1992 through June 1993, United States

Figure 6. Results of investigations of adult/adolescent AIDS cases with risk not identified, reported through June 1993[1]



[1]Excludes 66 children under 13 years of age whose risk is not identified: 56 children who are under investigation and 10 who have died, declined interview, or were lost to follow-up. An additional 201 children who were initially reported with a risk not identified have been reclassified after investigation.

[2]Heterosexual transmission. 533 of the 619 persons who had no risk identified after follow-up responded to a standardized questionnaire: 178 (36%) of 491 persons responding to questions related to sexually transmitted diseases gave a history of such diseases and 119 (36%) of 330 interviewed men reported sexual contact with a prostitute. Some of these persons may represent unreported or unrecognized heterosexual transmission of HIV. See *MMWR*;38:423-4, 429-34.

[3]Eight are health-care workers who developed AIDS after occupational exposure to HIV-infected blood, as documented by evidence of seroconversion; 2 are patients who developed AIDS after exposure to HIV within the health-care setting, as documented by laboratory studies; 1 is a person who acquired HIV infection perinatally and was diagnosed with AIDS after age 13; and 1 is a person with intentional self-inoculation of blood from an HIV-infected person.

Technical notes

Surveillance and reporting of AIDS

All 50 states, the District of Columbia, U.S. dependencies and possessions, and independent nations in free association with the United States[1] report AIDS cases to CDC using a uniform case definition and case report form. The original definition was modified in 1985 (*MMWR* 1985;34:373-5), in 1987 (*MMWR* 1987;36[suppl. no. 1S]:1S-15S), and again in 1993 (*MMWR* 1992;41[no. RR-17]:1-19). The revisions incorporated a broader range of AIDS-indicator diseases and conditions and used human immunodeficiency virus (HIV) diagnostic tests to improve the sensitivity and specificity of the definition.

For persons with laboratory-confirmed HIV infection, the 1987 revision incorporated HIV encephalopathy, wasting syndrome, and other indicator diseases that are diagnosed presumptively (i.e., without confirmatory laboratory evidence of the opportunistic disease). In addition to the 23 clinical conditions in the 1987 AIDS case definition, the 1993 expanded case definition for adults and adolescents includes HIV-infected persons with CD4+ T-lymphocyte counts of less than 200 cells/μL or a CD4+ percentage of less than 14, and persons diagnosed with pulmonary tuberculosis, recurrent pneumonia (more than 2 episodes in a 12-month period), and invasive cervical cancer. This expanded definition requires laboratory confirmation of HIV infection in a person with a CD4+ T-lymphocyte count of less than 200 cells/μL or with one of the added clinical conditions. Persons who meet the criteria for more than one definition category are classified hierarchically in the following order: pre-1987, 1987, and 1993. Persons in the 1993 definition category only meet the 1993 definition.

Each issue of this report includes information received and tabulated by CDC through the last day of the previous quarter. Data are tabulated by date of report to CDC unless otherwise noted. Data for U.S. dependencies and possessions and for associated independent nations are included in the totals.

Age group tabulations are based on the person's age at diagnosis of AIDS: adult/adolescent cases include persons 13 years of age and older; pediatric cases include children under 13 years of age.

Metropolitan areas with 500,000 or more population are included in this report. On December 31, 1992, the Office of Management and Budget announced new Metropolitan Statistical Area (MSA) definitions which reflect changes in the U.S. population determined by the 1990 census. These definitions were revised on June 30, 1993. The cities and counties which compose each metropolitan area in Table 2 are listed in the publication "Revised Statistical Definitions for Metropolitan Areas" (available from National Technical Information Service, accession no. PB93-505-824).

The metropolitan area definitions are the MSAs for all areas except the 6 New England states. For these states, the New England County Metropolitan Areas (NECMA) are used. Metropolitan areas are named for a central city in the MSA or NECMA, may include several cities and counties, and may cross state boundaries. For example, AIDS cases and annual rates presented for the District of Columbia in Table 1 include only persons residing within the geographic boundaries of the District. AIDS cases and annual rates for Washington, D.C., in Table 2 include persons residing within the metropolitan area, which includes counties in both Maryland and Virginia. State or metropolitan area data tabulations are based on the person's residence at diagnosis of the first AIDS-indicator disease(s).

Data in this report are provisional. Reporting delays (time between diagnosis and report to CDC) vary widely among exposure, geographic, racial/ethnic, and age categories, and have been as long as several years for some cases. About 55 percent of all cases are reported within 3 months of diagnosis, but about 20 percent are reported more than 1 year after diagnosis.

Although completeness of reporting of diagnosed cases varies by geographic region and population, studies conducted by state and local health departments indicate that reporting of AIDS cases in most areas of the United States is more than 85 percent complete (*J Acquir Immune Defic Syndr*, 1992;5:257-64; and *Am J Public Health* 1992;82:1495-9). In addition, multiple routes of exposure, opportunistic diseases diagnosed after the initial case report was submitted to CDC and vital status may not be deter-

[1]Included among the dependencies, possessions, and independent nations are Puerto Rico, the U.S. Virgin Islands, Guam, American Samoa, the Republic of Palau, the Republic of the Marshall Islands, the Commonwealth of the Northern Mariana Islands, and the Federated States of Micronesia. The latter 5 comprise the category "Pacific Islands, U.S." listed in Table 1.

mined or reported for all cases. Caution should be used in interpreting case-fatality rates because reporting of deaths is incomplete.

Exposure categories

For surveillance purposes, AIDS cases are counted only once in a hierarchy of exposure categories. Persons with more than one reported mode of exposure to HIV are classified in the category listed first in the hierarchy, except for men with both a history of sexual contact with other men and injecting drug use. They make up a separate category.

"Men who have sex with men" cases include men who report sexual contact with other men (i.e., homosexual contact) and men who report sexual contact with both men and women (i.e., bisexual contact). "Heterosexual contact" cases include persons who report either specific heterosexual contact with a person with (or at increased risk for) HIV infection (e.g., an injecting drug user), or persons presumed to have acquired HIV infection through heterosexual contact if they were born in countries with a distinctive pattern of transmission termed "Pattern II" by the World Health Organization (*MMWR* 1988;37:286-8, 293-5). Pattern II transmission is observed in areas of sub-Saharan Africa and in some Caribbean countries. In these countries, most of the reported cases occur in heterosexuals and the male-to-female ratio is approximately 1:1. Injecting drug use and homosexual transmission either do not occur or occur rarely.

"Risk not identified" cases are persons with no reported history of exposure to HIV through any of the routes listed in the hierarchy of exposure categories. Risk not identified cases include persons who are currently under investigation by local health department officials; persons whose exposure history is incomplete because they died, declined to be interviewed, or were lost to follow-up; and persons who were interviewed or for whom other follow-up information was available and no exposure mode was identified. Persons who have an exposure mode identified at the time of follow-up are reclassified into the appropriate exposure category.

Rates

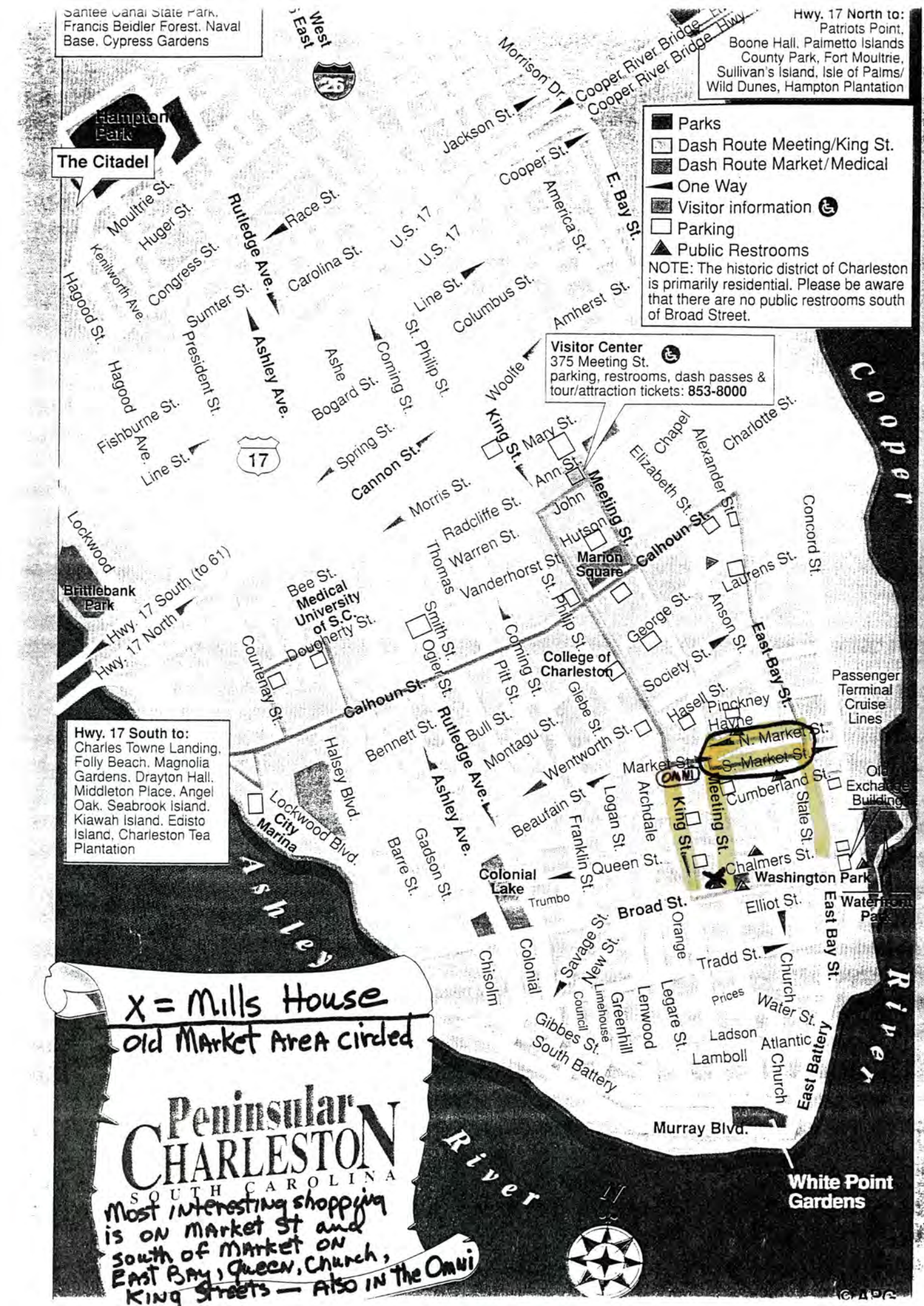
Rates are calculated on an annual basis per 100,000 population, based on U.S. Bureau of Census data from the 1990 census, and on extrapolations from the 1990 census and official Census Bureau estimates for 1991. Each 12-month rate is the number of cases for a 12-month period divided by the 1991 or 1992 population, multiplied by 100,000.

Case-fatality rates are calculated for each half-year by date of diagnosis. Each 6-month case-fatality rate is the number of deaths ever reported among cases diagnosed in that period (regardless of the year of death), divided by the number of total cases diagnosed in the period, multiplied by 100. Reported deaths are not necessarily caused by HIV-related disease.

PM698175660793325

Southern State Epidemiologists Meeting
November 15-17, 1993
Mills House Hotel
Charleston, South Carolina

November 14 -	Registration 6:00-7:00 pm - Hotel Lobby	
November 15 - Monday	8:00	Welcome, Introductions, Agenda Changes
	8:30	Health Care Reform/National AIDS Policy Office/HIV Directions Ms. Kristine Gebbie, - Director, National AIDS Policy Office
	9:15	Discussion with Ms. Gebbie - Moderator - Dee Breeden
	10:00	Break
	10:30	STD-TB-HIV Connection Moderator - Tom Farley Discussion by states and guests
	11:30	HIV Surveillance - Jeff Jones, HIV Surveillance, NCID
	12:00	Lunch - Speaker on Charleston, SC
	1:30	STD's - Moderator - Tom Farley Guest discussant - Mike St. Louis, Branch Chief, Clinical Epidemiological Branch, STD/HIV, NCPS
	2:30	STD Behavioral Science - Moderator - Dee Breeden Guest discussant - Sevgi Aral - Associate Director for Science - STD/HIV, NCPS
	3:30	TB - Moderator - Eric Brenner, South Carolina Guest discussant - Gene McCray, - TB Surveillance, Division of TB Elimination
	4:30	Adjourn (unless we are running over)
November 16 - Tuesday	8:00	Pertussis - Moderator/Presenter - Eric Brenner Guest discussant - Peter Strebel
	8:30	Immunization - Tracking, Barriers, What Works, Surveys, etc. Moderator - J.D. Lofgren Guest discussant - Peter Strebel, Nat. Immunization Program, CDC
	9:30	Group C Meningococcus - Moderator - Bruce Brackin, Mississippi
	10:00	Break
	10:30	Hepatitis ABCDE - (mostly B) Moderator - Jerry Gibson Discussants - J.P. Lofgren - HB false positive tests - Linda Wilson - EIS-SC - Employee Health HB Serology Study - Group Discussion
	11:00	Lead - Moderator - Richard Hopkins
	11:30	Flu Surveillance, Vibrio Vulnificus - Moderator - Richard Hopkins
	12:00	Lunch - - Business Meeting - CSTE Report - Becky Merriwether - EPO report - John Horan
	1:30	Discussion of Topics of Interest from Survey Moderator - Dee Breeden
	3:00	Adjourn
November 17 - Wednesday	8:00	E. coli 0157:H7 - Moderator - Diane Simpson - General Discussion
	8:30	Injury (handguns) - Tom Cole, North Carolina
	9:00	Emerging Infections/Diseases - Ruth Berkelman, Deputy Director, NCID
	10:00	Break
	10:30	Emerging Infections/Diseases- discussion
	12:00	Adjourn


Santee Canal State Park, Francis Beidler Forest, Naval Base, Cypress Gardens
Hwy. 17 North to: Patriots Point, Boone Hall, Palmetto Islands County Park, Fort Moultrie, Sullivan's Island, Isle of Palms/ Wild Dunes, Hampton Plantation
Parks
Dash Route Meeting/King St.
Dash Route Market/Medical
One Way
Visitor information
Parking
Public Restrooms
NOTE: The historic district of Charleston is primarily residential. Please be aware that there are no public restrooms south of Broad Street.
Visitor Center
375 Meeting St.
parking, restrooms, dash passes & tour/attraction tickets: 853-8000
Hwy. 17 South to: Charles Towne Landing, Folly Beach, Magnolia Gardens, Drayton Hall, Middleton Place, Angel Oak, Seabrook Island, Kiawah Island, Edisto Island, Charleston Tea Plantation
Hampton Park
The Citadel
Moultrie St.
Huger St.
Congress St.
Sumter St.
Hagood St.
Fishburne St.
Line St.
Rutledge Ave.
Ashley Ave.
Race St.
Carolina St.
U.S. 17
Cooper River Bridge
Jackson St.
Cooper St.
America St.
E. Bay St.
Columbus St.
Amherst St.
Woolfe
King St.
Meeting St.
Cannon St.
Spring St.
Morris St.
Radcliffe St.
Warren St.
Thomas
Vanderhorst St.
Mary St.
Ann St.
John
Hutson
Marion Square
Calhoun St.
Chapel
Alexander St.
Elizabeth St.
Charlotte St.
Concord St.
Laurens St.
Anson St.
George St.
Society St.
Hasell St.
Pinckney
Hayne
N. Market St.
S. Market St.
Market St.
Cumberland St.
State St.
Old Exchange Building
Passenger Terminal Cruise Lines
East Bay St.
Lockwood
Brittlebank Park
Hwy. 17 South (to 61)
Hwy. 17 North
Bee St.
Medical University of S.C.
Dougherty St.
Courtenay St.
Smith St.
Ogier St.
Coming St.
Pitt St.
College of Charleston
Bennett St.
Bull St.
Montagu St.
Glebe St.
Wentworth St.
Halsey Blvd.
Lockwood Blvd.
City Marina
Ashley River
Beaufain St.
Logan St.
Franklin St.
Archdale
Barre St.
Gadson St.
Colonial Lake
Trumbo
Queen St.
Chalmers St.
Washington Park
Waterfront Park
Broad St.
Elliot St.
Orange
Tradd St.
Church St.
Chisolm
Colonial
Savage St.
New
Council
Limehouse
Greenhill
Lenwood
Legare St.
Prices
Water St.
Gibbes St.
South Battery
Ladson
Lamboll
Atlantic
Church
East Battery
Murray Blvd.
White Point Gardens
Cooper River
X = Mills House
Old Market Area circled
Peninsular CHARLESTON
SOUTH CAROLINA
Most interesting shopping is on Market St and south of Market on East Bay, Queen, Church, King Streets — Also in the Omni