The Health of the Volunteer 2002

Peace Corps · Office of Medical Services

Dear Peace Corps Staff:

I am pleased to present the *Health of the Volunteer 2002* report. This report, issued by the Office of Medical Services, is based on reports by Peace Corps medical officers (PCMOs) worldwide of critical health issues observed among Peace Corps Volunteers. The annual report is used to identify trends in Volunteer health and is designed as feedback for PCMOs to assist in the training of Volunteers and to inform the agency on key issues regarding Volunteer health.

Health of the Volunteer 2002 includes detailed information on the 10 most common health conditions among Volunteers, on tropical diseases, and on conditions associated with sexual activity. Highlights include the sustained reduction of viral hepatitis through an immunization program for Volunteers and the reduction of sexually transmitted diseases in the Peace Corps Volunteer population through their own adoption of responsible behavior and avoidance of risky activities. Most information is broken down by region, age, and/or gender to better illustrate the scope of the health events reported.

The health and well-being of the Volunteers are a top priority for the Peace Corps, and both overseas and headquarter staff should be applauded for the care and support they provide Volunteers. Because of their efforts, and the efforts of the Volunteers themselves, we have seen increases in healthy behaviors and decreases in risks.

The Office of Medical Services is available to any office or individual for questions or comments on the findings of the *Health of the Volunteer 2002* report. Inquiries should be directed to Dr. Russ Gerber, Chief, Epidemiology and Surveillance, at 202.692.1517. Your feedback on this report is welcome.

Sincerely,

Gaddi H. Vasquez
Director

Executive Summary
Health of the Volunteer 2002

The *Health of the Volunteer* is a report produced by the Peace Corps Office of Medical Services (OMS). The report provides summary information for calendar year 2002 and analyzes trends in health conditions among Peace Corps Volunteers (PCVs).

2002 Highlights

- ***Reduction of Sexually Transmitted Diseases (STDs):*** The incidence of reported STDs in 2002 was 2.9 per 100 Volunteer/Trainee-Years (V/T-Years), a 17% decrease compared with 2001. The Africa region had the greatest decrease, down 36% compared to 2001.
- ***Sustained Reduction of Viral Hepatitis:*** Since the introduction of hepatitis A and hepatitis B vaccines in 1995, hepatitis cases among Volunteers have been greatly reduced. In 2002, two cases of hepatitis A were reported and no cases of hepatitis B were reported among PCVs. Only one case of hepatitis B infection has been reported among PCVs over the past eight years.

The 10 Leading Health-Related Events

The 10 most commonly reported health-related events among Volunteers and trainees in 2002 were (in decreasing frequency) acute diarrhea, upper respiratory illness, infectious dermatitis, mental health problems, dental problems, unintentional injuries, febrile illnesses, non-sexually transmitted gynecologic infections, lower respiratory illness, and environmental concerns.

In-Service Deaths

There was one Volunteer death in 2002, the result of an unintentional injury. A 22-year-old female Volunteer crashed on her bicycle while descending a paved road down a steep hill. Between 1961 and 2002 there have been 250 in-service Volunteer deaths.

Tropical Diseases

- ***Malaria:*** In 2002, the incidence of reported falciparum malaria in the Africa region was 4.0 per 100 V/T-Years, decreased 13% compared with 2001, and 75% less than in 1989.
- ***Dengue:*** In 2002, the incidence of dengue fever was 0.7 per 100 V/T-years. There were 46 reported cases in 16 countries. Forty cases (87%) occurred in the Inter-America and Pacific (IAP) region. Reported dengue cases show a marked seasonal pattern, with cases peaking between May and November. No cases of dengue in Volunteers in 2002 met the case definitions for either dengue hemorrhagic fever or dengue shock syndrome.

HIV

The incidence of HIV infection in 2002 was 3.2 per 10,000 V/T-Years. Two newly identified HIV infections were reported among Volunteers in 2002. The self-reported risk factor in both was unprotected sexual intercourse. Although there is year-to-year variability in HIV incidence, since 1989 there appears to be no overall increasing or decreasing trend in incidence among PCVs.

Pregnancies

In 2002, the incidence of pregnancies was 1.3 per 100 female V/T-Years. This was 18% greater than the incidence of pregnancies in 2001, but 41% less than in 1989. In 2002, there were 48 pregnancies. The greatest number (26) (54%) occurred in the IAP region. The incidence of pregnancies in all three regions has been slowly decreasing since 1996.

Tuberculosis

In 2002, the incidence of tuberculin skin test (TST) conversions was 1.5 per 100 V/T-Years. The overall incidence of TST conversions increased 7% in 2002 compared with 2001. Ninety-one TST conversions occurred in 34 countries in 2002. The incidence of TST conversions in 2002 was highest in the Africa region. In 2002, no Volunteer was diagnosed with active TB.

Vaccine-Preventable Diseases

Vaccine-preventable diseases reported among Volunteers in 2002 included six cases of typhoid fever. Also in 2002, one case of meningococcal meningitis was reported in a Volunteer from Burkina Faso. A large outbreak of meningococcal disease, featuring an unusual serotype (W-135) spread by pilgrims from the hajj, occurred in Burkina Faso in 2002.

Medical Evacuations (Medevacs)

The overall incidence of medevacs in 2002 was 10.4 per 100 V/T-Years. Of the total 652 medevacs in 2002; 545 (84%) were OMS-authorized medevacs, primarily to receive care in the United States, and 107 (16%) were country-sponsored medevacs, primarily to receive care overseas in regional health centers.

STATUS

REPORT

The Health of the Volunteer

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Introduction

The Health of the Volunteer is a report produced by the Peace Corps Office of Medical Services (OMS) for use by Peace Corps Medical Officers (PCMOs) and agency staff. The current issue provides summary information for calendar year 2002 and trend information over time. The purpose of the report is: (1) to document and analyze trends in health conditions among in-service and some returned Peace Corps Volunteers (PCVs), and (2) to provide feedback concerning these trends in a format that is useful for training and education of Volunteers and staff. The report includes graphic displays of information that can be used as educational material during pre-service training (PST) and in-service training (IST) sessions. Each figure in Appendix A has been placed on a single page to facilitate transfer to a transparency during in-country training sessions.

The data used to prepare this report come from several sources: (1) PCMOs worldwide, who submit monthly epidemiologic surveillance system (ESS) reports to OMS; (2) individual case reports concerning assaults, in-country hospitalizations, and country-sponsored (regional) medevacs; (3) the OMS "Deaths in Service" database; and (4) selected Post-Service Unit data for returned Volunteers. The Surveillance and Epidemiology Unit, OMS provide data management and analysis.

For 2002, unless otherwise noted, incidence is reported using events per 100 Volunteer/Trainee-Years (V/T-Years) as the denominator. V/T-Years is a measure of person-time that accounts for both the number of PCVs and the length of time each PCV is at risk for a health event. Each Volunteer contributes only as much person-time (V/T-Years) to a population at risk for a health event as he or she is actually at risk for that health event. For example, if a PCV leaves after six months, he/she is at risk only during the six-month period he/she is present and contributes only half a V/T-Year. If a PCV leaves after a year, he/she contributes one full V/T-Year. Incidence per 100 V/T-Years allows data to be compared in age-, sex-, region-, and country-specific analyses.

In calendar year 2002, the Peace Corps ended or suspended operations in six countries (Cote d'Ivoire, Estonia, Jordan, Latvia, Lithuania, and Slovakia). In 2002, the Peace Corps opened or reopened operations in seven countries (Bangladesh, East Timor, Kyrgyz Republic, Macedonia, Peru, Turkmenistan, and Uzbekistan). The Peace Corps suspended operations in Madagascar during 2002 but later in the

year reopened the program. Closed and opened programs do not provide data for a full calendar year. Therefore, incidence of health events for such countries should be interpreted cautiously.

There are at least four limitations on interpreting the data presented in this report. First, comparing incidences among countries is most valid for countries that have similar numbers of Volunteers. Second, incidences in countries that have few V/T-Years are more imprecise than incidences in countries with many V/T-Years. Statistically, the estimates are said to have wide confidence intervals. Caution should therefore be used when comparing incidences in countries that have few V/T-Years. Appendix B, "Numbers and Incidence of Reportable Health Conditions for Calendar Year 2002," includes the number of reported cases for each monitored condition, the incidences of the condition, and the V/T-Years in the particular country. This should help the reader better understand the distribution of conditions in individual countries and regions.

A third limitation is that PCVs may be selective in reporting medical conditions to PCMOs (underreporting and overreporting). PCVs who are in frequent contact with the PCMO or who have conditions that are particularly severe or persistent may report conditions to PCMOs that might otherwise not have been reported. Conversely, PCVs who are in remote locations may not report or even seek health care for some reportable conditions, particularly those that are mild or self-limited. A fourth limitation is misclassification of reportable conditions. This may occur because different posts have different capacities to resolve specific diagnoses. For this reason, in this report, some conditions may be included in categories to which they should not be assigned, and some may not be included in categories to which they ought to be assigned.

OMS encourages PCMOs, country directors, and regional staff to review the incidences of diseases and conditions for their respective countries. OMS staff are available for consultation on trends of concern or for discussions about possible interventions. OMS invites feedback on the content of this report and any suggested modifications that would enhance the report's usefulness in future years. In particular, we are interested in feedback that would assist PCMOs in better educating and training Volunteers. Please direct all comments and suggestions to the Surveillance and Epidemiology Unit.

2002 Highlights

Three stories in 2002 are highlights of ongoing success in the Peace Corps Volunteer health system. These stories are: (1) the completeness of epidemiologic reporting by PCMOs, (2) the reduction of sexually transmitted diseases, and (3) the sustained reduction of viral hepatitis.

Completeness of Reporting by PCMOs

In 2002, PCMOs provided 100% of the ESS and Assault Notification and Surveillance System (ANSS) reports that were expected of them. This was the fourth consecutive year of 100% completeness in ESS and ANSS reporting. PCMOs provided 99% of the in-country hospitalization (ICH) and 98% of the country-sponsored (regional) medevac (CSM) reports that were expected. Complete reporting provides the most useful data for accuracy in the analysis of health events. PCMOs are to be congratulated for and take considerable pride in the completeness of reporting that they have achieved.

Reduction of Sexually Transmitted Diseases

Sexually transmitted diseases (STDs), which include genital-ulcer-producing conditions (syphilis, genital herpes), human papillomavirus (genital warts), and non-ulcer-producing STDs (chlamydia, gonorrhea, urea plasma, trichomoniasis, etc.), were reported in all regions. The incidence of reported STDs in 2002 was 2.9 per 100 V/T-Years, a 17% decrease compared with 2001 (3.5 per 100 V/T-Years) (Figure 1).

Each STD represents a potential exposure to human immunodeficiency virus (HIV). The risk of HIV infection during a single unprotected sexual contact with an HIV-infected partner is greater among individuals with STDs, and is greatest for those who have genital ulcer disease.[1] The combination of a compromised mucosal surface and an increased number of infection-fighting cells with receptors for HIV (CD4+ T-lymphocytes) in the ulcer infiltrate is thought to play a role.[2] The occurrence of an STD represents an additional opportunity to counsel Volunteers to reduce their health risks from unprotected intimate behaviors.

Of particular note is that the incidence of STDs was lowest in the Africa region (1.6 per 100 V/T-Years). There was a substantial decrease (36%) in the incidence of STDs in 2002 relative to 2001 in the Africa region (Figure 2). Given that STDs and the sexual risk behaviors that transmit STDs, such as unprotected sex, also increase the risk

of HIV infection, and that some countries in the Africa region have very high prevalences of HIV infection (there are estimates that 20% to 30% of the population in some countries is HIV-infected), the reduction of STDs in PCVs serving in the Africa region is an important event that will ultimately protect PCVs from a number of diseases and medical conditions.

The reduction of STDs in PCVs, especially in the Africa region, is further evidence that communities that commit to changing sexual risk behaviors can be effective in reducing STDs and HIV infections. The results are similar to those observed when San Francisco communities committed to HIV/AIDS prevention efforts in the early 1990s. [3]

In 2002, four countries had incidences of reported STDs greater than 10.0 per 100 V/T-Years (three in the IAP region and one in the EMA region) (Figure 3).

Sustained Reduction of Viral Hepatitis

Type-specific viral hepatitis is reported in the monthly ESS and includes hepatitis A, B, C, and E, as well as unspecified hepatitis.

Hepatitis A, usually transmitted via the oral-fecal route, is invariably a self-limited disease but can impair a person's ability to work for one or more months because of the accompanying symptoms (fatigue, malaise, weakness, and anorexia). In 1995, the U.S. Food and Drug Administration (FDA) approved the use of hepatitis A vaccine, which involves a two-dose immunization strategy (1.0 mL vaccine intramuscularly in months zero and six). The Peace Corps began giving the hepatitis A vaccine in 1995. Until 1995, immune globulin had been given to Volunteers every three to four months in an effort to provide passive immunity against symptomatic hepatitis A infection. However, immune globulin was less than ideal because of the need for repeat dosing during Volunteer service and the variability in product antibody titer and hence in the immunity it produced.

In 1994 and 1995 the incidence of reported hepatitis A in PCVs was 0.19 per 100 V/T-Years (Figure 4). Since the introduction of hepatitis A vaccine in 1995, hepatitis A among Volunteers has been greatly reduced. Two cases of hepatitis A were reported in PCVs in 2002 (incidence of 0.03 per 100 V/T-Years). The cases, reported in Nepal and Nicaragua, occurred in PCVs who had received the first dose of hepatitis A vaccine but had not yet completed the two-dose series, hence likely had incomplete immunity.

Hepatitis B, a sexually transmitted and blood-borne pathogen, usually has a similar clinical course to that seen in patients with hepatitis A. However, it may be associated with several possible severe sequelae, including fulminant hepatitis (requiring liver transplantation), chronic active hepatitis, superinfection with hepatitis D, cirrhosis, and hepatocellular carcinoma. Hepatitis B infection occurs primarily in young adulthood when individuals become sexually active.

An FDA-approved hepatitis B vaccine has been available in the United States since the 1980s. Because the total lifetime risk of hepatitis B infection is approximately 5%, the United States has adopted a long-range goal of eliminating hepatitis B infection and its sequelae through universal childhood immunization against this virus.[4] However, in the short term, the U.S. Public Health Service has recommended that all sexually active adults be immunized against hepatitis B.[5]

In 1995 the Peace Corps implemented universal hepatitis B immunization for Volunteers. Since the introduction of the hepatitis B vaccine in 1995, hepatitis B among Volunteers has virtually disappeared. In 1993 the incidence of hepatitis B was 0.05 per 100 V/T-Years. In 2002 there were no reported cases of hepatitis B, and only one case of hepatitis B infection has been reported among PCVs during the past eight years (1998).

As a result of hepatitis B immunization, infections with hepatitis D have also been averted. Hepatitis D is a defective virus that is incapable of replicating in the absence of hepatitis B.

The virtual elimination of hepatitis A and hepatitis B as threats to Volunteer health emphasizes the need to focus efforts on educating Volunteers in strategies aimed at preventing other infectious and noninfectious forms of hepatitis. Training aimed at preventing infections caused by the oral-fecal and sexually transmitted routes is key, and PCMOs routinely provide such training.

Among the hepatitis virus group, hepatitis C, E, and G have no effective vaccine or immune globulin to prevent infection. Hepatitis C virus can be sexually transmitted, usually in practices that compromise the mucosal barrier, such as anal-receptive intercourse. Chronic liver disease occurs in over 60% of hepatitis C infections in adults.[6] In 2002, there were no reported cases of hepatitis C infection among PCVs.

Hepatitis E is transmitted via the oral-fecal route, whereas hepatitis C and G are primarily transmitted via the

parenteral route. In 2002, there were no reported cases of hepatitis E infection.

The "catchall" reporting category, unspecified hepatitis, is the major type of hepatitis now reported among PCVs. It has a wide variety of infectious and noninfectious causes including other viruses such as cytomegalovirus (CMV), Epstein-Barr virus (EBV), herpes simplex virus (HSV), varicella zoster virus (VZV), human immunodeficiency virus (HIV), and dengue virus; bacterial infections including leptospirosis and syphilis; and drug or toxin exposures such as isoniazid. In 2002, the incidence of unspecified hepatitis was 0.16 per 100 V/T-Years, little changed since 1994.

The 10 Leading Reported Health-Related Events

Worldwide Distribution of "The Top 10"

The 10 most commonly reported health-related events among Volunteers and trainees in 2002 were (in decreasing frequency) acute diarrhea, upper respiratory illness, infectious dermatitis, mental health problems, dental problems, unintentional injuries, febrile illnesses, non-sexually transmitted gynecologic infections, lower respiratory illness, and environmental concerns (Figure 5). In 2002, mental health problems decreased in rank order to become the fourth most commonly reported health condition. It ranked third in 1999–2001.[7-9]

Examining the rank order of incidences of health conditions worldwide may mask region-specific patterns. In 2002, in the Africa and IAP regions, acute diarrhea was the most frequently reported health condition overall, and upper respiratory illness (URI) was the second leading reported health condition. In 2002, in the EMA region, URI was the leading reported health condition and acute diarrhea ranked second. This was a return to the regional pattern observed prior to 1999.

Regional differences in the rank order of common health conditions may reflect differing health risks, the number of Volunteers at risk in different regions, the presence of Volunteers with preexisting health conditions that are more readily accommodated in one location over another, and/or PCMO reporting patterns. In 2002, mental health problems were the fourth most frequently reported health condition overall, although they ranked third in the EMA region, fourth in the Africa region, and sixth in the IAP region. In 2002, infectious dermatitis ranked as the third most frequently reported health condition both overall, and in the Africa and IAP regions, but ranked fourth in the EMA region.

Africa Region. The Africa region top 10 reportable conditions shared similarities with those reported worldwide (Figure 6). Acute diarrhea and URIs ranked first and second, respectively. Dermatitis ranked third, febrile illness ranked seventh, and presumptive malaria ranked ninth. This rank order reflects the warm climates and the frequency of tropical and infectious disease exposures in the Africa region. Mental health problems ranked fourth, dental problems ranked fifth, and unintentional injuries ranked sixth in the Africa region in 2002. Environmental concerns did not appear among the top 10 health conditions in the Africa region in 2002.

IAP Region. The IAP region top 10 reportable conditions were also similar to those reported worldwide (Figure 7). Acute diarrhea and URIs ranked first and second, respectively. Dermatitis ranked third, dental problems ranked fourth, and unintentional injuries ranked fifth. In 2002, in the IAP region, mental health problems ranked sixth among leading health problems. Environmental concerns were the 10th leading reported health condition in the IAP region in 2002, as they were worldwide.

EMA Region. In 2002, upper respiratory illness was the leading reportable health condition in the EMA region, as it was in the years prior to 1999. Acute diarrhea was the second leading reportable health condition in the EMA region (Figure 8). The incidence of upper respiratory illness in the EMA region was higher in 2002 (65.0 per 100 V/T-Years) than the incidence in the Africa (37.6) and IAP (56.3) regions (Table 15). This finding probably reflects that countries located in the EMA region are primarily in cold or temperate climatic zones. In 2002, mental health problems ranked third and dental problems ranked fourth in the EMA region. Dermatitis dropped to sixth and febrile illness to seventh, again probably reflecting cold or temperate climates. In 2002, unintentional injuries ranked fifth in the EMA region, as they have since 2000. In 2002, environmental concerns were the ninth leading health problem in the EMA region, up from 10th in 2001.

#1: Acute Diarrhea

Acute diarrhea was the leading cause of reportable illness among Volunteers worldwide (81.6 cases per 100 V/T-Years) (Figure 5). The incidence of acute diarrhea among Volunteers in 2002 increased 3% relative to that in 2001, but overall has remained relatively stable since 1996 (Figure 9). In 2002, five countries had incidences of acute diarrhea

greater than 200.0 per 100 V/T-Years (Figure 10), compared with two countries in 2001 and one country in 2000. Three countries, all in the Africa region (Burkina Faso, Niger, and Senegal), had incidences of acute diarrhea greater than 160.0 per 100 V/T-Years every year from 2000 to 2002.

The category acute diarrhea includes laboratory-confirmed cases of amebiasis, giardiasis, salmonellosis, shigellosis, and other laboratory- and nonlaboratory-confirmed cases. The quality of laboratory services in each country is variable. Therefore, the predictive value of positive and negative laboratory tests is too low to consider reported results valid in some countries. However, all these etiologies can be associated with acute and, at times, chronic diarrhea.

Because of acute diarrhea's leading frequency in reporting and substantial impact on the health of Volunteers, preventing it through safe food and water consumption practices continues to be an appropriate focus of PST and IST sessions designed for trainees and Volunteers.

#2: Upper Respiratory Tract Illnesses

URI was the second leading cause of reportable illness among Volunteers worldwide (51.8 per 100 V/T-Years). The incidence of URI in 2002 increased 7% compared with the incidence in 2001 (48.6 per 100 V/T-Years), but has remained relatively constant since 1996 (Figure 11). Incidences greater than 130.0 per 100 V/T-Years were reported in six countries in 2002 (five of these are in the EMA region) (Figure 12). Armenia and Macedonia have had incidences of URI greater than 100.0 per 100 V/T-Years every year from 2000 to 2002.

Illnesses reported in this category include influenza and influenza-like illnesses, pharyngitis, tonsillitis, acute laryngitis, otitis media, and sinusitis. Viruses, bacteria, mycoplasmas, and chlamydia are all associated with URIs.

Epidemic influenza is commonly seen in winter months in Northern Hemisphere countries with temperate and cold climates. This includes many countries in the EMA region. Influenza is a viral infection that can cause "classic flu" and a full spectrum of URI conditions. Influenza may also cause lower respiratory tract disease, including bronchitis and pneumonia. In 2000, the Advisory Committee on Immunization Practices lowered the age at which universal yearly influenza immunization is recommended from 65 to 50 years.[10] Therefore, Volunteers who are now 50 or older, as well as Volunteers who have required hospitalization or regular medical follow-up during the preceding year because of chronic metabolic disease (including diabetes), renal dysfunction, hemoglobinopathies, or immunosuppression, should receive annual influenza immunization to avert potentially life-threatening events, such as bacterial pneumonia, that can follow acute influenza virus infection (see Technical Guideline [TG] #300 for specific influenza vaccine indications).

#3: Dermatitis

The third-ranked health-related event among Volunteers in 2002 was infectious dermatitis (32.2 per 100 V/T-Years), defined as an infection of the skin due to bacterial, fungal, or parasitic organisms evaluated by a health care provider. The diagnosis does not require laboratory confirmation. This category does not include acne, eczema, or nonspecific rashes. Dermatitis is commonly encountered in tropical areas, where secondary bacterial infections of so-called minor abrasions are more common than in temperate regions. Additionally, superficial fungal infections of the skin, such as *Malassezia furfur* (tinea versicolor), are common in moist, humid environments that promote fungal growth. Examining regional trends in 2002, the highest incidence of infectious dermatitis was in the IAP region (39.6 per 100 V/T-Years), and the lowest was in the EMA region (22.0 per 100 V/T-Years) (Table 3).

#4: Mental Health Problems

In 2002, mental health problems, defined as one-to-one discussions (in person or by telephone) between PCMOs and Volunteers regarding mental health concerns (not concerning the environment), ranked fourth in reported frequency (27.7 per 100 V/T-Years). Reasons for counseling included episodes of depression, problems with interpersonal relationships, stress reactions, anxiety, and/or loneliness. If a Volunteer is seen numerous times within a month for the same ongoing mental health problem, the event is reported only once.

The incidence of mental health problems in 2002 (27.7 per 100 V/T-Years) decreased for the first time in seven years, dropping 19% from the incidence in 2001 (34.2 per 100 V/T-Years). However, the incidence is still 36% higher than the incidence in 1993 (20.4 per 100 V/T-Years) (Figure 13). The overall trend of increased incidence may be the result of a variety of factors: (1) greater accommodation by the Peace Corps of persons with stable mental health problems, (2)

more persons serving in the Peace Corps who have unknown or undisclosed preexisting mental health problems, (3)

greater societal acceptance of seeking mental health counseling, with an associated increased demand by Volunteers for services, and/or (4) greater availability of mental health services at posts through PCMOs and other counselors.

Incidences of reported mental health problems were highly variable from country to country (Table 14). In 2002, five countries had incidences greater than 100.0 per 100 V/T-Years (Figure 14) (three in the EMA region and two in the IAP region). Lithuania had an incidence of mental health problems greater than 100.0 per 100 V/T-Years in both 2001 and 2002, but Peace Corps operations in that country ceased in 2002. In 2002, four countries (Armenia, Estonia, Macedonia, and Suriname) reported no mental health problems among Volunteers. The Peace Corps ceased operations in Estonia in 2002.

The substantial variability in reported mental health problems among countries may reflect over reporting, no reporting, or misclassification of mental health problems, or misunderstanding by PCMOs of the surveillance case definition for mental health problems.

Mental health problems may or may not lead to medical evacuation (medevac) to the United States for additional evaluation. An OMS study of mental health medevacs during 1996–1998 showed that the incidence of OMS-authorized mental health medevacs increased 78% from 1996 (0.9 per 100 V/T-Years) to 1998 (1.6 per 100 V/T-Years).[11] A panel of external experts convened by the Peace Corps (the Mental Health Task Group) reviewed mental health issues related to Peace Corps service and issued a report in 2001 describing the basis of Volunteer mental health problems, the scope of their impact, and ways that the Peace Corps might address the issue.[12]

#5: Dental Problems

Dental problems were the fifth leading cause of reportable health-related events among Volunteers in 2002. The incidence of dental problems (25.5 per 100 V/T-Years) in 2002 decreased 7% compared with the incidence in 2001 (27.3 per 100 V/T-Years), the first decrease observed in nine years, but the incidence remains 51% higher than the incidence in 1993 (16.9 per 100 V/T-Years) (Figure 15). PCMOs report any condition involving the teeth or gums that required evaluation by a dentist or other health care professional. The category does not include repeat visits for the same problem or routine screening or prophylaxis visits. Examining regional trends in 2002, the highest incidence of dental problems was in the EMA region (34.2 per 100 V/T-Years) (Table 2), a finding that may reflect the older average age of Volunteers serving in the EMA region. The Africa region had the lowest incidence of dental problems (18.1 per 100 V/T-Years), as well as the youngest average age of Volunteers.

#6: Unintentional Injuries

Unintentional injuries include pedestrian-, bicycle-, motorcycle-, other motor vehicle-related (e.g., automobile, truck, bus), sports-related, water-related, and "other" injuries. In 2002, unintentional injuries ranked as the sixth leading reportable health condition (22.2 per 100 V/T-Years). The most frequently reported category of unintentional injury was "other," a category that includes falls, burns, animal and insect bites, poisoning, and cuts, abrasions, and puncture wounds not related to sports, water, or vehicles) (13.6 per 100 V/T-Years) (Table 10).

Among the specific causes of unintentional injuries in 2002, sports-related injuries (a category that first became reported separately in 2001) had the highest incidence (4.1 per 100 V/T-Years), and motorcycle injuries had the lowest incidence (0.3 per 100 V/T-Years) (Figure 16).

Examining regional trends, the IAP region had the highest incidence in 2002 of sports-related injuries (5.6 per 100 V/T-Years), and the Africa region had the lowest (2.2 per 100 V/T-Years) (Table 9). Six countries had incidences of sports-related injuries greater than 14.0 per 100 V/T-Years (Figure 17). Two countries, El Salvador and Romania, had incidences of sports-related injuries greater than 14.0 per 100 V/T-Years in both 2001 and 2002.

The overall incidence of bicycle injuries in 2002 was 1.6 per 100 V/T-Years, a 23% increase compared with the incidence in 2001 (1.3 per 100 V/T-Years). In 2002, the Africa region had 62 reported bicycle injuries (61% of the total) and the highest region-specific incidence (2.7 per 100 V/T-Years). The EMA region had 14 reported bicycle injuries (14% of the total) and the lowest incidence (0.8 per 100 V/T-Years). Six countries (four in the Africa region, one in the IAP region, and one in the EMA region) had incidences of bicycle injuries greater than 5.0 per 100 V/T-Years in 2002 (Figure 18). Burkina Faso has had an incidence of bicycle injuries greater than 5.0 per 100 V/T-Years every year from 1999 to 2002.

Data to analyze bicycle injuries by body location are not available. However, routine use of bicycle helmets is a proven

way to reduce head injuries[13] and facial trauma.[14] In 2001, Section 523 of the *Peace Corps Manual* was revised to require all Peace Corps Volunteers to wear an approved bicycle helmet while operating a bicycle or riding as a passenger. The one in-service death in 2002 (see "In-Service Deaths" section below) was due to head trauma in a Volunteer who was not wearing a helmet.

The incidence of reported motor vehicle (excluding motorcycles) injuries in 2002 was 1.2 per 100 V/T-Years. The annual incidence of motor vehicle injuries has changed little since 1993, ranging between 0.9 and 1.4 per 100 V/T-Years. Four countries (two in the EMA region, one in the Africa region, and one in the IAP region) had incidences of motor vehicle injury greater than 5.0 per 100 V/T-Years (Figure 19).

Injury incidence does not account for the prevalence of use of motorcycles, bicycles, and other motor vehicles in a country. Because of this, some important underlying trends may be obscured. OMS continues to explore methods to analyze injuries associated with motorcycles, bicycles, and other motor vehicles in conjunction with information about the numbers of bicycles, motorcycles, and other vehicles used at posts in order to more accurately characterize transportation-related health risks to Volunteers.

The incidence of reported pedestrian injuries in 2002 was 1.1 per 100 V/T-Years (Table 7). Examining regional trends in 2002, the Africa region had the highest incidence (1.2 per 100 V/T-Years), and the EMA region had the lowest incidence (0.8 per 100 V/T-Years). Five countries (three in the EMA region, one in the Africa region, and one in the IAP region) had incidences of pedestrian injuries in 2002 greater than 5.0 per 100 V/T-Years (Figure 20), compared with six countries exceeding 5.0 per 100 V/T-Years in 2001. Lesotho and Paraguay had incidences of pedestrian injuries greater than 4.0 per 100 V/T-Years every year from 2000 to 2002.

Water-related injuries include any injury associated with swimming, diving, water-skiing, boating, or other water-based activity. Not surprisingly, examining regional trends in 2002, the highest incidence of water-related injuries occurred in the IAP region (0.7 per 100 V/T-Years) (Table 10). The IAP region reported 17 (81%) of the 21 total water-related injuries reported in 2002. Water-related injuries occurred in 12 countries in 2002. Five countries (all in the IAP region) had incidences of water-related injuries greater than 3.0 per 100 V/T-Years (Figure 21); four of the five (East Timor, Micronesia, Samoa, and Vanuatu) are countries that consist primarily of islands. Vanuatu had an incidence of water-related injuries greater than 3.0 per 100 V/T-Years in both 2001 and 2002.

Between 1994 and 2002, four (13%) of the 30 in-service deaths among Volunteers were water-related. A water safety PST module was developed by OMS for worldwide distribution in 1997.

In 2002, the overall incidence of motorcycle-related injuries was 0.3 per 100 V/T-Years (Figure 22). This incidence was the same as the incidence in 2001 and 81% less than the incidence in 1994 (1.6 per 100 V/T-Years). There were 16 reported motorcycle-related injuries in 2002 (Table 8); 11 (69%) in the Africa region (six countries), four (25%) in the IAP region (three countries), and one (6%) in the EMA region. Six countries reported having only one motorcycle injury in 2002, and four countries reported having multiple motorcycle injuries (Figure 23).

The distribution of motorcycle injuries is highly restricted. This health event, therefore, is a promising target for further reductions or even elimination using policy interventions in specific countries. Eight countries (seven in the Africa region [Benin, Burkina Faso, Cameroon, Guinea, Mali, Niger, and Senegal] and one in the IAP region [Dominican Republic]) account for 79% (60 of 76) of the motorcycle-related injuries that occurred among Peace Corps Volunteers during the four-year period 1999–2002.

Current Peace Corps policy is to limit the use of motorcycles to only those cases where using a motorcycle is clearly necessary to accomplish the goals of a particular project. The result of this policy is that motorcycles for Volunteers have not been purchased through headquarters for at least the past 10 years, and Volunteers have been greatly discouraged from using motorcycles in the field and when on leave. In addition, most posts have not purchased motorcycles for Volunteer use. This combination of policies and practices has resulted in a reduced incidence of reported motorcycle-related injuries. OMS supports the continuation of these policies and practices to prevent motorcycle-related injuries.

Other prevention methods for motor-cycle injuries include the routine use of helmets to protect motorcycle riders from head trauma, and required training for the few Volunteers who still require motorcycles for their projects.

#7: Febrile Illnesses

The seventh-ranked category, febrile illnesses (15.6 per 100 V/T-Years), includes any illness accompanied by a documented temperature of at least 38 degrees Celsius that does not have a separate category in the surveillance system or is of unknown etiology. The incidence of febrile illnesses among Volunteers in 2002 decreased 4% compared with 2001 (16.2 per 100 V/T-Years).

Some of the decreased incidence of reported febrile illnesses since 1999 may be due to the initiation of dengue fever reporting as a separate ESS category in 2000. In 1999 and earlier, dengue fever, seen particularly during summer and autumn months, was reported as a febrile illness and was not an independent reporting category (see "Tropical Diseases" section below for additional discussion of dengue).

Certain other reporting patterns suggest different etiologies for some of the other febrile illnesses. An increase in the number of reported febrile illnesses in the EMA region during the winter months suggests unrecognized influenza as well as other virus activity. In addition, fever alone may be the only manifestation for some infections, most notably viral infections, which often resolve rapidly before any definite diagnosis can be established.

Four countries reported having no febrile illnesses in 2002 (Jordan, Kyrgyz Republic, Macedonia, and Moldova) (Table 4). The Peace Corps suspended operations in Jordan in 2002. Moldova has not reported any febrile illnesses since 2000. These findings may reflect increased capacity to define specific etiologies for febrile illnesses, non-reporting, or misunderstanding by PCMOs in these countries of the surveillance case definition for febrile illnesses.

#8: Non-Sexually Transmitted Gynecologic Infections

Non-sexually transmitted gynecologic infections (NTGI) ranked as the eighth leading reported health-related event among Volunteers (13.5 per 100 V/T-Years). It is important to note that this is the overall incidence among all Volunteers and is used only for comparison purposes with other reportable health conditions. As only female Volunteers are at risk for this condition, its sex-specific incidence in 2002 is much higher (22.2 per 100 female V/T-Years) (Table 16), indicating it has a greater impact on the Volunteer population than the overall incidence indicates.

This category includes bacterial vaginosis and vaginal yeast infection. Although these two conditions are bothersome to women, they usually are associated with low morbidity. However, they are important because of the risk of acquiring human immunodeficiency virus when a woman is exposed to HIV in the setting of a gynecologic infection.[15] Vaginal or cervical inflammation increases the presence of white cells in the local area, including CD4+ T-lymphocytes, which carry receptors for HIV on their surface. Inflammation is also associated with microscopic disruption of the vaginal mucosa, which also may increase the risk of HIV acquisition.[16] Alerting female Volunteers about this potential risk factor, as well as early diagnosis and treatment of these conditions when they occur, is important.

#9: Lower Respiratory Tract Illnesses

In 2002, lower respiratory tract illness (LRI) was the ninth-ranked cause of reported illness among Volunteers (7.7 per 100 V/T-Years) (Table 15). Examining regional trends in 2002, the IAP region had the highest incidence of LRI (10.7 per 100 V/T-Years); the Africa region had the lowest incidence (4.3 per 100 V/T-Years). Incidences greater than 20.0 per 100 V/T-Years occurred in seven countries in 2002 (Figure 24), compared with five countries in 2001. Guatemala has had an incidence of LRI greater than 20.0 per 100 V/T-Years every year from 2000 to 2002.

This reporting category includes pneumonia, pneumonitis, bronchitis, and pleural disease. (Asthma is a separate reporting category in the ESS.) LRI can be associated with bacteria, viruses, mycoplasmas, and chlamydia.

#10: Environmental Concerns

In 2002, environmental concerns, defined as one-to-one discussions (in person or by telephone) between PCMOs and Volunteers regarding exposures to environmental threats, ranked 10th in reported frequency (5.4 per 100 V/T-Years).

Included in these interactions are concerns about air pollution, heavy-metal exposures, pesticides, radiation, water pollution or poor water quality, food sanitation, and disaster threats (e.g., earthquakes, hurricanes). These problems may or may not lead to medical evacuation or site changes. If a Volunteer is seen numerous times within a month for the same ongoing environmental concern, the event is only reported once.

Incidence of environmental concerns in 2002 increased 29% compared with 2001 (4.2 per 100 V/T-Years) (Figure 25). The incidence has remained relatively constant since 1996, although there was a slight increase in 1999 associated with Y2K

concerns. Environmental concerns were 260% greater in 2002 than in 1993 (1.5 per 100 V/T-Years).

The incidence of reported environmental concerns varies greatly from country to country (Table 3). In 2002, six countries reported incidences of environmental concerns greater than 20.0 per 100 V/T-Years (Figure 26). Romania has had an incidence of environmental concerns greater than 20.0 per 100 V/T-Years every year from 2000 to 2002.

Widespread distribution and use of the documents *Environmental Health: Answers to Volunteer and Staff Questions*[17] and *Radiation Health and Safety: Answers to Volunteer and Staff Questions*[18] may help to lessen the incidence of environmental concerns among Volunteers.

In-Service Deaths

Between 1961 and 2002 there were 250 in-service Volunteer deaths. The overall mortality (the number of deaths per 10,000 Volunteers per year) since 1990 remains at historical lows (Figure 27). Between 1961 and 2002, unintentional injuries resulted in the highest fatality rates relative to other causes, followed by medical illnesses (Figure 28). Except for isolated periods (1981–1985 and 1996–2002), medical illnesses resulted in higher cause-specific fatality rates than homicides.

Transportation-related deaths represent a substantial portion of deaths from unintentional injury, although the numbers of automobile and motorcycle deaths have significantly decreased since the 1967–1976 period (Figure 29). It is notable that there have been no in-service suicide deaths from 1983 to 2002.

One Death in 2002

One Volunteer died in 2002, the result of an unintentional injury. A 22-year-old female Volunteer crashed on her bicycle while descending a paved road down a steep hill. She was rendered unconscious in the crash, having sustained a head injury and a fractured clavicle. She was evacuated to a tertiary medical facility where surgery for intracranial bleeding was performed within 24 hours. However, she continued to suffer intracranial hypertension and cerebral edema, and was determined to be brain-dead seven days after the crash. Although the Peace Corps had provided her a bicycle helmet, she was not wearing it at the time of the crash.

As noted (see "Unintentional Injuries" section above), in 2001, Section 523 of the *Peace Corps Manual* was revised to require all Peace Corps Volunteers to wear an approved bicycle helmet while operating a bicycle or riding as a passenger. Bicycle helmets are a proven intervention to reduce head injuries from bicycle crashes.[13]

Tropical Diseases

Malaria

There are four *Plasmodium* species that cause malaria in humans. *Plasmodium falciparum* is found primarily in tropical regions and poses the greatest risk of death for nonimmune persons because it can infect and lyse all ages of red blood cells. Falciparum malaria can progress rapidly, with a lucid patient becoming obtunded within minutes. If cerebral malaria or other major organ dysfunction occurs, the risk of death is approximately 20%, even with proper therapy.[19] This picture of rapid progression is most commonly seen in individuals without immunity, such as young children and expatriates, even those who have lived in malarious areas for extended periods of time. Additionally, *Plasmodium falciparum* has been the species most likely to develop resistance to antimalarial drugs.[20]

Since 1962 there have been five Volunteer deaths from falciparum malaria, but none has occurred since the introduction of weekly mefloquine use in 1990 (Figure 30). This change in the chemoprophylactic strategy aimed at chloroquine-resistant *Plasmodium falciparum* (CRPF) malaria brought a concomitant decrease in reported incidence of falciparum malaria among Volunteers serving in the Africa region.

In 2002, the incidence of reported falciparum malaria in the Africa region was 4.0 cases per 100 V/T-Years, a 13% decrease compared with 2001 (4.6 cases per 100 V/T-Years), and 75% less than the rate reported in 1989 (16.0 per 100 Volunteers/year), when CRPF became widespread in Africa.

The overall incidence of non-falciparum malaria in 2002 was 0.1 per 100 V/T-Years (Figure 31). Non-falciparum malaria continues to occur in the Africa and IAP regions at very low and relatively constant incidences (Table 12).

All Volunteers serving in malarious areas are required to follow an effective malaria chemoprophylaxis regimen. As described above, the introduction of mefloquine chemoprophylaxis was temporally linked with a decrease in deaths from falciparum malaria and the observed decrease in the incidence of laboratory-confirmed cases of falciparum malaria compared with the late 1980s.

Increasingly, PCMOs are using drugs other than mefloquine for prophylaxis in CRPF areas because of Volunteer complaints about side effects encountered with mefloquine use. These drugs include doxycycline and Malarone.

The half-life of doxycycline is 22 to 24 hours (in individuals on a continuous dosing regimen), so it must be taken daily to ensure adequate protection against malaria. Mefloquine, on the other hand, has a half-life of about 21 days. Therefore, the potential health conesquences of a single missed dose are quite different for these two agents. Delaying a dose of doxycycline by one day places the Volunteer at risk for clinical disease including cerebral malaria and possible death. A similar dosing delay with mefloquine does not place the Volunteer at the same level of risk.

Malarone (a fixed combination of atovaquone and proguanil) was approved by the FDA in 2000 as an antimalarial agent for both chemoprophylaxis and treatment.[21] Dosing frequency with Malarone is similar to that with doxycycline in that it must be taken daily to ensure adequate protection against malaria.

The percentage of PCVs in the Africa region taking doxycycline as malaria chemoprophylaxis in 2002 was 12.0% (Table 21). The percentage of Volunteers taking Malarone in 2002 was 1.6%. Mefloquine is used by almost 80% of Volunteers in the Africa region every month.

These data suggest the need for OMS to continue working with PCMOs and Volunteers to find optimal malaria chemoprophylaxis strategies that reduce risks of malaria but are acceptable to Volunteers. Additionally, these findings suggest that surveillance of adverse reactions from these agents is warranted.

In 2002, one case of falciparum malaria that occurred in Malawi was suggestive of mefloquine resistance. Malaria parasites were confirmed on the blood smear. The PCV reported adherence to weekly mefloquine prior to developing symptoms, and serum mefloquine levels were adequate. Surveillance efforts for mefloquine resistance will continue. In order to accomplish this (as stated in TGs #840 and #845), it is very important for PCMOs to send blood smears to confirm malaria parasites in each Volunteer diagnosed with malaria; to complete a malaria case report form on each, including whether the Volunteer reported adherence to his/her malaria chemoprophylaxis prior to developing symptoms; and to send serum specimens for Volunteers who are taking mefloquine or Malarone to determine if drug levels were adequate in persons who developed malaria.

Dengue

Dengue fever is caused by infection with certain viruses from the family known as flaviviruses. There are four serotypes of dengue virus (DEN-1, DEN-2, DEN-3, DEN-4), all of which cause human disease. Dengue virus is transmitted primarily by mosquitoes of the species *Aedes aegypti*. These are day-biting mosquitoes that prefer humans to animals as the source of their blood meals.

It is estimated that there are as many as 100 million cases of dengue fever annually worldwide.[22] In the past two decades, the geographic extent of dengue fever has increased markedly, with more cases and outbreaks particularly in Western Hemisphere countries (i.e., South and Central America and the Caribbean). Clinical illness can range from a self-limited, nonspecific viral syndrome to severe hemorrhagic disease with shock and death. The classic form of the disease is characterized by fever, chills, myalgia, headache, and after a few days, the development of a rash (nonpruritic, often petechial). Blood examination often shows thrombocytopenia and leukopenia. The disease resolves over a few weeks, although fatigue may last for months. However, the risk of severe disease increases when sequential infections occur with different viral serotypes. The severe forms of the disease are dengue hemorrhagic fever (DHF) and dengue shock syndrome (DSS). The case definition by the World Health Organization for DHF, in addition to fever and thrombocytopenia, includes hemorrhagic phenomena (bleeding from mucosa, intestinal tract, injection sites, or other locations) and hemoconcentration (a rise in hematocrit of at least 20% above baseline). The case definition of DSS includes all the criteria of DHF plus clinical evidence of hypotension (shock).

In 2000, dengue fever was added as a reportable condition in the ESS. Separate dengue reporting was added because it had previously been captured only as an unspecified febrile illness, because Volunteers are known to become infected with dengue virus, and because there is a global resurgence of the disease.

In 2002, there were 46 reported cases of dengue fever in 16 countries (Table 2). The incidence of reported dengue was 0.7 per 100 V/T-Years. Forty cases (87%) occurred in the IAP region, where the incidence was 1.7 per 100 V/T-Years. Per-country incidence varied, ranging from 0.0 to 9.3 cases per 100 V/T-Years. Reported dengue cases show a marked seasonal pattern, with cases peaking between May and November (Figure 32). No cases of dengue in Volunteers in 2002 met the case definitions for either DHF or DSS.

No vaccines or antiviral agents specifically treat or provide prophylaxis against dengue fever. Prevention measures are to avoid mosquito bites by using insect repellents, clothing that covers exposed skin, pesticide-impregnated bed nets, and screens on dwelling doors and windows. These prevention methods are also effective in preventing malaria, which is also transmitted by mosquitoes.

Schistosomiasis

Schistosomiasis is characterized by granulomatous formations that result from infection with parasitic trematode blood flukes known as schistosomes. Almost all human infections are caused by five species, *Schistosoma mansoni*, *S. hematobium, S. japonicum, S. mekongii,* and *S. intercalatum.* Mixed infections can occur, particularly in sub-Saharan Africa. The global distribution of the parasites, egg morphology, preferred site of residence in the human host, snail host, and pathophysiology of the disease differ among the species. Nonetheless, all infections are acquired from freshwater sources containing free-swimming larval forms (cercariae) that have developed in snails. The most common water contacts that result in infection are wading or swimming in infected water, at which time cercariae penetrate the skin.

Schistosomiasis is endemic in all the regions in which PCVs serve, although it is most widespread in sub-Saharan Africa. The incidence and prevalence of schistosomiasis vary within each country in which the parasites are endemic.

In 2002, the incidence of reported schistosomiasis among in-service Volunteers was 0.6 per 100 V/T-Years (Figure 33). This was twice the incidence reported in 2001 (0.3 per 100 V/T-Years). In 1998, OMS implemented close-of-service screening procedures for schistosomiasis in Volunteers who lived in or traveled through schistosomiasis-endemic areas. Increases in the incidence of schistosomiasis reported after 1998 are likely due to increased serologic screening.

All 38 reported cases of schistosomiasis in 2002 were in Volunteers serving in the Africa region (Table 18). Eleven countries reported schistosomiasis in 2002, compared with eight countries in 2001, underscoring that freshwater sources other than Lake Malawi may be sites where Volunteers acquire infection. Seventeen cases (45% of the total) in 2002 were reported from Malawi.

The potential risk of acute clinical illness in the nonimmune host exists during the several-month period following infection and often before the diagnosis is suspected. During this time, acute schistosomiasis can occur, and very rarely, neurologic schistosomiasis secondary to the ectopic deposition of eggs in the brain or spinal cord can occur. The onset of both conditions is usually within 35 to 40 days of exposure to heavily infested water and corresponds to the first period of egg deposition by the now-mature flukes within the body. It is during this time that the body begins to mount an antibody response to the fluke and egg antigens.

When acute schistosomiasis is suspected in an active-duty Volunteer, the PCMO should contact the area PCMO (APCMO) and/or OMS, along with having local consultation when available.

Mild chronic schistosomiasis may occur in Volunteers who become infected after exposure to freshwater infested with cercariae but who remain asymptomatic. This usually occurs in the setting of a light infection with few adult worms present. However, over time symptoms may develop that are referable to the site of infection. Such cases may come to medical attention following service. In 2002, 40 post-service claims by returned Volunteers for schistosomiasis were filed with the U.S. Department of Labor. One completed service in 1999, six in 2000, 16 in 2001, and 17 in 2002. Claimants served in 15 countries. Those from Senegal (eight), Tanzania (six), Madagascar (five), and Zambia (five) made the most claims in 2002.

Prevention is the key to controlling morbidity and disability due to schistosomiasis among Volunteers. PSTs and ISTs are ideal times to stress the importance of avoiding skin exposure to suspect freshwater sources, which in Africa include essentially all freshwater lakes and slow-moving streams. Should very brief or unintentional skin exposures occur, cercarial penetration can be prevented or minimized by vigorous and complete towel drying, followed by the immediate application of 70% isopropyl alcohol to the skin to kill cercariae on the surface.[23]

Filariasis

Filariasis is a clinical condition resulting from infection with one of several long, threadlike nematodes that parasitize the tissues of humans and some animals. These parasites, which have different vectors for transmission, include the mosquito-borne parasites that cause lymphatic filariasis: *Wuchereria bancrofti*, *Brugia malayi*, and *Brugia timor; Onchocerca volvulus* (river blindness), transmitted by black flies; and *Loa loa* (eye worm), transmitted by the tabanid fly. In addition, some less common varieties of filaria exist in the Africa and IAP regions. Each parasite

has its own ecological niche, although some overlap occurs. *W. bancrofti* is endemic in most warm, humid regions of the world, including Latin America.

Volunteers serving in areas in which *Loa loa* is highly endemic receive diethylcarbamazine (DEC) as a weekly chemoprophylactic therapy.

In 2002, two cases of filariasis were reported (Table 4). One was in a PCV from Cameroon and the other was in a PCV from Lesotho who was exposed in Gabon. The overall incidence of filariasis in 2002 was 0.03 per 100 V/T-Years (Figure 34).

In 2002, no returned Volunteers submitted claims to the U.S. Department of Labor for service-related filariasis.

Neither the ESS nor service-related claims differentiate among the species of filariasis. However, based upon the geographic distribution of the species, cases in Central Africa are most likely to be loiasis, whereas cases from West Africa are more likely to be onchocerciasis. Mixed infections with both *Loa loa* and *O. volvulus* can occur as a result of overlapping endemic regions.

Eosinophilia is commonly seen with filarial infections, so filariasis should be considered in Volunteers living in an endemic area who have persistent eosinophilia and in whom an evaluation for intestinal parasites has been unrevealing. Significant elevation in the eosinophil count of several weeks' duration has been associated with the development of endocardial lesions,[24] although the frequency of this complication is low. No Volunteers have thus far been diagnosed with endocardial lesions. PCMOs who identify a Volunteer with cryptic persistent eosinophilia should consult with their APCMO and/or OMS to discuss further diagnostic options.

Intestinal Helminths

Soil-transmitted intestinal helminths, or geohelminths, have been reported in all regions where Volunteers serve. Intestinal helminths are divided into three categories according to their life cycle. Type 1, the direct geohelminths, include *Enterobius vermicularis* and *Trichuris trichiura* and do not require a period in the soil to become infectious for humans. Type 2, the modified direct geohelminths, are passed in the stool and undergo a period of development in the soil before they can be infectious upon ingestion. Included in this group are *Ascaris lumbricoides* and *Toxocara canis.* The type 3 geohelminths infect humans via penetration of the skin and include *Ancylostoma* (hookworm) and *Strongyloides stercoralis.*

In 2002, the incidence of reported geohelminth infection was 3.1 per 100 V/T-Years, 15% greater than the incidence in 2001 (2.7 per 100 V/T-Years) (Figure 35). Examining regional trends in 2002, the largest number of cases (123) (63%) and highest incidence (5.4 per 100 V/T-Years) were in the IAP region (Table 5). All three regions have demonstrated slowly decreasing incidences since 1993 (Figure 36).

Efforts to reduce intestinal helminth infections should continue to focus on prevention strategies that interrupt transmission and decrease the risk of exposure.

HIV and Conditions Associated With Sexual Activity

Human Immunodeficiency Virus Infections

Two newly identified HIV infections were reported among Volunteers in 2002. The self-reported risk factor in both was unprotected sexual intercourse. The incidence of HIV infection in PCVs in 2002 was 3.2 per 10,000 V/T-Years (Figure 37).

Routine HIV testing of all Peace Corps applicants was required beginning in 1987. Also beginning in 1987, all Volunteers were offered voluntary HIV testing at close of service. On the basis of HIV testing, 32 HIV infections are known to have been acquired by Volunteers during Peace Corps service.

The overall incidence of HIV infection for the period 1993–2002 was 3.5 per 10,000 V/T-Years, or about one in every 3,000 Volunteers. Although there is year-to-year variability in HIV incidence, since 1989 there appears to be no overall increasing or decreasing trend in incidence (Figure 38).

During the period 1993–2002, the incidence in women (4.0 per 10,000 V/T-Years) was 40% higher than the incidence in men (2.9 per 10,000 V/T-Years) (Figure 39). Male-to-female transmission of HIV is known to be more efficient than female-to-male transmission,[25] and likely accounts for the higher incidence in women. This finding highlights that unprotected sexual intercourse predominates as a risk factor for HIV acquisition during Peace Corps service.

The incidence of HIV infection in the Africa region (8.0 per 10,000 V/T-Years) during 1993–2002 was over four times greater than the incidence in the IAP region (1.8 per 10,000 V/T-Years). No cases of HIV infection occurred among Volunteers in the EMA region during this period (Figure 40).

The highest age-specific incidence of HIV infection during the period 1993–2002 occurred in Volunteers ages 30 to 39 years (8.1 per 10,000 V/T-Years), while the lowest incidence occurred in persons under 25 years old (0.4 per 10,000 V/T-Years) (Figure 41).

A substantial proportion of Volunteers have another STD identified in-country prior to testing positive for HIV infection. This finding suggests the need for continually educating Volunteers throughout their service regarding strategies to reduce their risk behaviors for HIV and other STDs.

Since 1997, OMS has evaluated possible HIV exposures for consideration of post-exposure prophylaxis (PEP) using antiretroviral drugs. In 1998, OMS issued a protocol that requires urgent consultation on cases in which HIV exposure is possible and HIV PEP may be indicated. During the 4 ½-year period from July 1997 through December 2001, 173 Volunteers received HIV PEP, an overall incidence of HIV PEP of 5.8 per 1,000 V/T-Years.[26] No PCV on whom OMS has consulted or who has received HIV PEP has become HIV-infected. However, no cases would be expected in a group of this size, as the risk of HIV transmission per sexual contact with an HIV-infected source is estimated at one in 1,000.[25]

There have been three (9%) deaths to date among the 32 returned Volunteers who were infected with HIV during service.

Most of the lost wages, diminished productivity, emotional stress, and health care costs for HIV-infected persons ensue when the individual moves into the later stages of infection. Recent advances in combination antiretroviral therapy, including introduction of protease inhibitors, have improved survival in HIV-infected individuals.[27] However, as a result of the added expense of such therapies, the average lifetime cost of medical care for persons living with HIV/AIDS is anticipated to increase by at least $50,000 to $100,000.

Pregnancies

PCMOs report pregnancy confirmed by appropriate techniques during the month in which the pregnancy was confirmed. In 2002, the incidence of pregnancies was 1.3 per 100 female V/T-Years (Figure 42). This was 18% greater than the incidence of pregnancies in 2001 (1.1 per 100 female V/T-Years), but 41% less than in 1989 (2.2 per 100 female Volunteers). The reduction in pregnancies since 1989 is notable because female V/T-Years as a percentage of all V/T-Years have increased by 18%, from 52% in 1993 to 61% of all V/T-Years in 2002 (Figure 43). Almost all pregnancies in PCVs are unintended.

There were 48 pregnancies in 2002 (Table 16). The greatest number (26) (54%) and highest incidence (1.9 per 100 female V/T-Years) occurred in the IAP region (Figure 44). The incidence of pregnancies in all three regions has been slowly decreasing since 1996, with the lowest incidence in 2002 occurring in the EMA region (0.8 per 100 female V/T-Years). Honduras reported five pregnancies in 2002. Eight countries (three in the IAP region, three in the EMA region, and two in the Africa region) had incidences of pregnancies in 2002 greater than 5.0 per 100 female V/T-Years (Figure 45). This compares with two countries with incidences greater than 5.0 per 100 female V/T-Years in 2001.

In order to reduce the incidence of pregnancies, it is important for female PCVs to reduce unprotected sexual intercourse, which would also protect them from HIV and STDs. PCMOs should continue their emphasis on safer sexual behaviors during PST and IST, as well as during the one-on-one counseling opportunities that occur with Volunteers throughout their service.

Other Health Conditions

Tuberculosis

Tuberculosis (TB) remains one of the leading causes of death worldwide. The emergence of multiple-drug-resistant TB has increased the urgency for improved surveillance for this disease.[28] The total lifetime risk for developing an active case of TB following infection is 10%. More than half of this risk is borne in the first two years following infection. The ideal way to identify new infections and to prevent active disease among persons at risk for acquiring the organism is to have an annual skin-testing program. Early identification of infections is coupled with preventive therapy, usually isoniazid (INH) chemoprophylaxis, against the develop-ment of active disease. The use of INH decreases the total lifetime risk of developing active TB to 2%.

In 2002, the incidence of tuberculin skin test (TST) conversions was 1.5 per 100 V/T-Years (Figure 46). Ninety-one TST conversions occurred in 34 countries in 2002 (Table 19). The overall incidence

of TST conversions increased 7% in 2002 relative to the incidence in 2001 (1.4 per 100 V/T-Years).

Examining regional trends in 2002, the incidence of TST conversions was highest in the Africa region (1.8 per 100 V/T-Years) and lowest in the IAP region (1.0 per 100 V/T-Years) (Figure 47). Six countries reported incidences greater than 5.0 per 100 V/T-Years in 2002 (four in the EMA region and two in the Africa region) (Figure 48) compared with two countries in 2001.

In 2002, no Volunteer was diagnosed with active TB. The last time a Volunteer was diagnosed with active TB was in 2001.

TB remains a risk for Volunteers throughout the world. The introduction of TG #645, "Pulmonary Tuberculosis," in 1995 increased awareness of TB infection and the benefits of initiating treatment for latent TB infection prior to the development of active TB. TG #645 stresses the use of the Mantoux intradermal skin test as the preferred screening method, and instructs that Volunteers are not allowed to read, interpret, or report the results of their own tests. TG #645 also states that the multipuncture (tine) skin test is not acceptable for screening Volunteers at close of service.

Use of proper technique in applying a TST cannot be overemphasized. Equally important is when and how the test is read. Optimally, the TST is read by a health care provider 48 to 72 hours after the test has been applied. The induration (not redness) at the site should be measured and recorded in millimeters. Misclassification of some Volunteers as converters may occur when they are in fact reactors who had their immunity "boosted" at the time of testing prior to service (this phenomenon is most likely to occur in those over age 55).

Vaccine-Preventable Diseases and Vaccine Use

PCMOs report monthly the number of doses of vaccines given to Volunteers and trainees for hepatitis A, hepatitis B, Japanese B encephalitis, meningococcal disease, rabies (preexposure and post-exposure), tick-borne encephalitis, and typhoid (oral and injectable). Also reported is the number of doses of rabies hyperimmune immunoglobulin (HRIG).

In 2002, 25,161 doses of vaccines and nine doses of HRIG were given to Volunteers and trainees (Tables 22 and 23). The largest number of doses given was for rabies (7,645 preexposure, 450 post-exposure), followed by hepatitis B (5,497), hepatitis A (4,669), and typhoid (51 oral, 3,478 injectable). This distribution is affected in part by the fact that preexposure rabies vaccine and hepatitis B vaccine consist of three-dose series.

Vaccine-preventable diseases reported among Volunteers in 2002 included six cases of typhoid fever. The occurrence of such cases can be expected because field trials of the injectable Vi capsular polysaccharide typhoid vaccine, the one preferred for overseas use, demonstrated an efficacy of only 74% in preventing blood-culture-confirmed typhoid fever among vaccine recipients when observed for 20 months in a disease-endemic area.[29]

Also in 2002, one case of meningococcal meningitis was reported in a Volunteer from Burkina Faso. Burkina Faso is in the African "meningitis belt" that extends from Senegal in the west to Ethiopia in the east and contains all or part of 15 countries. Cases typically occur during the "dry season" between November and April. In 2002, Burkina Faso had an epidemic of over 12,000 cases of meningococcal disease with over 1,400 deaths.[30] Significantly, many of these cases were with *Neisseria meningitidis* serogroup W135. Historically, meningococcal disease in Africa has primarily been with *N. meningitidis* serogroup A. Widespread meningococcal disease in Africa with serogroup W135 represents a major change in the epidemiology of the disease. This change has been accelerated by respiratory carriage and spread of *N. meningitidis* serogroup W135 via pilgrims attending the annual hajj in Saudi Arabia.[31]

All Volunteers serving in the Africa region are required to be immunized for meningococcal disease using quadrivalent (A,C,Y, W135) vaccine (see TG #300). In 2002, Volunteers received 2,083 doses of meningococcal vaccine (Table 22).

The case of meningococcal meningitis in the Volunteer from Burkina Faso in 2002 most likely represented a vaccine failure, as the Volunteer received meningococcal vaccine at the beginning of service. Vaccine failure in this case cannot be definitively proven, however, as the infecting organism was not isolated and therefore not serotyped. The clinical diagnosis was based on the presentation of symptoms and physical findings compatible with the disease, the observation of appropriate organisms on a gram stain of cerebrospinal fluid, and a serologic antibody response by the patient that was diagnostic.

Asthma

The incidence of reported asthma cases in 2002 was 2.3 per 100 V/T-Years, a 5% increase over the incidence in 2001 (2.2 per 100 V/T-Years) (Figure 49). This

category includes both newly diagnosed cases of asthma and recurrences of previously controlled asthma. Examining regional trends in 2002, the IAP region reported the highest incidence of asthma (2.7 per 100 V/T-Years) (Table 14). Eight countries reported an incidence of asthma greater than 6.0 per 100 V/T-Years (Figure 50). Five of these countries also had an incidence of asthma greater than 6.0 per 100 V/T-Years in 2001 (Burkina Faso, Costa Rica, Estonia, Georgia, and Guatemala). Burkina Faso, Estonia, and Georgia are not designated as countries that can accommodate Volunteers with controlled asthma, so these data suggest that asthma reported in these countries represents either new-onset asthma or previously unrevealed asthma. The Peace Corps closed operations in Estonia in 2002. OMS continues to review which countries are able to accommodate Volunteers with stable, controlled asthma and updates country-specific information as appropriate.

Alcohol Problems

The incidence of reported problems with alcohol among Volunteers in 2002 was 1.9 per 100 V/T-Years, an increase of 27% compared with 2001 (1.5 per 100 V/T-Years) (Figure 51). However, the incidence in 2002 was 24% less than the peak incidence of alcohol problems reported in 1996 (2.5 per 100 V/T-Years). Alcohol problems are defined as situations in which a Volunteer's behavior is altered or his/her physical or mental acuity is impaired because of alcohol intoxication. Signs of intoxication include violent behavior, slurred speech, a decrease in physical coordination, or unconsciousness. Medical staff, other in-country staff, or other reliable sources might observe incidents. Multiple incidents of alcohol problems in the same Volunteer during the same month are reported only once, however PCMOs clinically evaluate such incidents and address them as indicated.

Examining regional trends in 2002, the highest incidence of alcohol problems was reported in the EMA region (3.2 per 100 V/T-Years) (Table 1), a finding that has also been observed in previous years. This can be partially explained by cultural norms regarding alcohol use in some of the EMA region countries in which social drinking by Volunteers may be culturally encouraged, and which can later lead to problem drinking.

Cardiovascular Conditions

The incidence of reported cardiovascular conditions in 2002 was 1.2 per 100 V/T-Years (Table 1). Examining regional trends in 2002, the highest incidence was reported in the EMA region (2.8 per 100 V/T-Years). This may reflect the older age of Volunteers who serve in the EMA region. Reported cardiovascular conditions are those related to the heart and blood vessels that are evaluated by a health care professional. Although one cardiovascular problem may result in several visits, it is reported only once. Palpitations and chest pain are not reportable as a cardiovascular condition unless a specific cardiac disorder is diagnosed.

Consistent with the association of cardiovascular conditions with older age, in a study of OMS-authorized medevacs ages 65 or older during 1996–1998, cardiovascular conditions represented the largest percentage (15%) of final diagnostic categories of medevacs.[32]

Health Interactions

Volunteer-PCMO Contacts

PCMOs report the number of contacts they have with Volunteers about health conditions on a monthly basis. A contact is defined as an interaction that a Volunteer or trainee has with the health unit for any health- or safety-related matter. Contacts include office visits, telephone conversations, letters, faxes, e-mails, or site visits by the PCMO in which health-related matters are discussed. They also include visits for routine immunizations and medical supplies. These data do not include interactions between Volunteers and PCMOs that occur during PST or IST, when the PCMO is teaching or interacting with a group of Volunteers.

In 2002, there were 145,040 Volunteer-PCMO contacts, or 12,087 contacts per month (Table 20). This translates to 2.1 contacts per V/T-Year each month, an increase of 11% compared with the contact rate in 2001 (1.9 per V/T-Year per month). Contact rates increased in all three regions in 2002, with the greatest increase (14%) and the highest rate (2.5 per V/T-Year per month) reported in the EMA region (Figure 52). Contact rates provide a better estimate of the total workload of PCMOs than the cumulative number of illnesses and conditions reported monthly in the ESS.

Medevacs

Medevacs include both OMS-authorized and country-sponsored (regional) medevacs (CSMs). OMS-authorized medevacs

are reported in the Peace Corps Medevac Case Management System managed by the Field Support Unit. The number of CSMs is reported monthly in the ESS, and individual case reports of each CSM are reported as per TG #430. The overall incidence of medevacs in 2002 was 10.4 per 100 V/T-Years. There were 652 medical evacuations in 2002; 545 (84%) were OMS-authorized medevacs, primarily to receive care in the United States, and 107 (16%) were CSMs (Table 13) (Figure 53). The incidence of all medevacs in 2002 increased 1% compared with 2001 (10.3 per 100 V/T-Years). However, the incidence of OMS-authorized medevacs increased by 5% (from 8.3 per 100 V/T-Years in 2001 to 8.7 per 100 V/T-Years in 2002), while the incidence of CSMs decreased by 15% (from 2.0 per 100 V/T-Years in 2001 to 1.7 per 100 V/T-Years in 2002) (Figure 54). The incidence of CSMs in 2002 was the lowest incidence reported since 1996.

In 2002, the incidence of OMS-authorized medevacs was approximately the same in all three regions (8.6 per 100 V/T-Years in the IAP region, 8.7 in the Africa region, and 8.8 in the EMA region) (Figure 55).

The distribution of CSMs varied by region. Examining regional trends in 2002, the highest incidence of CSMs was in the Africa region (3.4 per 100 V/T-Years), and the lowest was in the IAP region (0.6 per 100 V/T-Years).

The observed differences likely reflect the overall health care delivery systems in countries of a particular region, a country's geographic proximity to the United States, and/or the availability of nearby advanced-care tertiary facilities. In the Africa region, the presence of APCMOs along with the limited availability of advanced medical care, except in regional centers such as Cote d'Ivoire (prior to its closure), Kenya, Senegal, and South Africa, likely accounts for the higher incidence of CSMs in the Africa region.

In-Country Hospitalizations

The incidence of in-country hospitalizations (ICHs) reported in 2001 was 5.8 per 100 V/T-Years, an increase of 7% compared with 2001 (5.4 per 100 V/T-Years) (Figure 56).

An ICH is defined in TG #410 as an overnight stay in a clinic, hospital, or similar facility authorized by medical staff for the monitoring or treatment of a health condition that requires prolonged attendance by a medical professional. An overnight stay at a non-health-care facility (e.g., a staff member's residence) is included among hospitalizations if the Volunteer had a condition that required hospitalization but an appropriate hospital was not available.

Examining regional trends in 2002, the IAP region had the highest incidence of ICHs (9.3 per 100 V/T-Years), over twice the incidence reported in the EMA region (4.2 per 100 V/T-Years) or the Africa region (3.4 per 100 V/T-Years) (Table 6).

In 2002, two countries (Honduras and Philippines) had incidences of ICHs greater than 20.0 per 100 V/T-Years. Both countries also had incidences of ICHs greater than 20.0 per 100 V/T-Years in 2001. These patterns may reflect differences in locally available facilities and supporting services including laboratories, differences in patterns of medical evacuations for acute illnesses, and underreporting of hospitalizations in countries where the PCMO's home or the Peace Corps health unit serves as the de facto hospital.

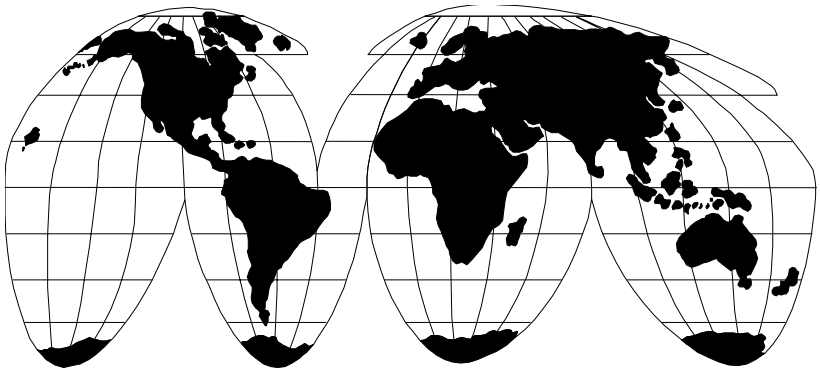
References

1. Laga M, et al. 1993. Non-ulcerative sexually transmitted diseases as risk factors for HIV-1 transmission in women: results from a cohort study. *AIDS*, 7: 95-102.
2. Holmberg SD, et al. 1989. Biologic factors in the sexual transmission of human immunodeficiency virus. *J Infect Dis*, 160: 116-125.
3. Katz MH. 1997. AIDS epidemic in San Francisco among men who report sex with men: successes and challenges of HIV prevention. *J Acquir Immune Defic Syndr Hum Retrovirol*, 14 (suppl 2): S38-S46.
4. CDC. 1991. Hepatitis B virus: a comprehensive strategy for eliminating transmission in the United States through universal childhood vaccination. *Morb Mortal Wkly Rpt*, 40: RR-13.
5. CDC. 1990. Protection against viral hepatitis. *Morb Mortal Wkly Rpt*, 39: RR-2.
6. CDC. 1998. Recommendations for prevention and control of hepatitis C virus (HCV) infection and HCV-related chronic disease. *Morb Mortal Wkly Rpt*, 47: RR-19.
7. Gerber AR, White K (eds.). 2002. *The Health of the Volunteer 2001*. Peace Corps, Wash D.C.
8. Gerber AR, Prybylski D (eds.). 2001. *The Health of the Volunteer 2000*. Peace Corps, Wash D.C.
9. Gerber AR, Prybylski D (eds.). 2000. *The Health and Safety of the Volunteer 1999*. Peace Corps, Wash D.C.
10. CDC. 2000. Prevention and control of influenza. *Morb Mortal Wkly Rpt*, 49: RR-3.
11. Rimoin A, Gerber AR. 1999. *Office of Medical Services-Authorized Mental Health Medical Evacuations, 1996–1998.* Peace Corps, Wash D.C.
12. The Mental Health Task Group. 2001. *Mental Health Report*. Peace Corps, Wash D.C.
13. Thompson DC, et al. 1989. A case-control study of the effectiveness of bicycle safety helmets. *N Engl J Med*, 320: 1361-1367.
14. Thompson DC, et al. 1996. Effectiveness of bicycle safety helmets in preventing serious facial injury. *JAMA*, 276: 1974-1975.
15. Torian LV, et al. 1995. Increasing HIV-1 seroprevalence associated with genital ulcer disease, New York City, 1990-1992. *AIDS*, 9: 177-181.
16. Weir SS, et al. 1994. Gonorrhea as a risk factor for HIV acquisition. *AIDS*, 8: 1605-1608.
17. Bergeisen, GH. 1999. *Environmental Health: Answers to Volunteer and Staff Questions.* Peace Corps, Wash D.C.
18. Bergeisen, GH. 2001. *Radiation Health and Safety: Answers to Volunteer and Staff Questions.* Peace Corps, Wash D.C.
19. Murphy GS, Oldfield EC. 1996. Falciparum malaria. *Infect Dis Clin N Amer*, 10: 747-775.
20. Lobel HO, Kozarsky PE. 1997. Update on prevention of malaria for travelers. *JAMA*, 278: 1767-1771.
21. Shanks GD. 1999. New options for the prevention and treatment of malaria: focus on the role of atovaquone and proguanil hydrochloride. *J Travel Med*, 6: S1.

22. Rigau-Perez JG, et al. 1998. Dengue and dengue hemorrhagic fever. *Lancet*, 352: 971-977.
23. Chin J (ed.). 2000. *Control of Communicable Diseases Manual*. Am Pub Health Assn, Wash D.C.
24. Gleich GJ, et al. 1993. The biology of the eosinophilic leukocyte. *Annu Rev Med*, 44: 85-101.
25. Mastro TD, de Vincenzi I. 1996. Probabilities of sexual HIV-1 transmission. *AIDS*, 10 (suppl A): S75-S82.
26. Gerber AR, White K. 2002. *HIV Post-Exposure Prophylaxis in Peace Corps Volunteers 1997–2001*. Peace Corps, Wash D.C.
27. Carpenter CCJ, et al. 1996. Antiretroviral therapy for HIV infection in 1996. *JAMA*, 276: 146-154.
28. Garin B, et al. 1995. Drug-resistant *Mycobacterium tuberculosis* strains in tuberculosis inpatients in Bangui, Central African Republic. *AIDS*, 9: 213-214.
29. Acharya IL, et al. 1987. Prevention of typhoid fever in Nepal with the Vi capsular polysaccharide of *Salmonella typhi*. *N Engl J Med*, 317: 1101-1104.
30. Decosas J, Koama JB. 2002. Chronicle of an outbreak foretold: meningococcal meningitis W135 in Burkina Faso. *Lancet Infect Dis*, 2: 763-765.
31. Taha MK. 2000. Serogroup W135 meningococcal disease in Hajj pilgrims. *Lancet*, 356: 2159.
32. Gerber AR. 1999. *Office of Medical Services-Authorized Medical Evacuations in Older Volunteers, 1996–1998*. Peace Corps, Wash D.C.

APPENDIX A

2002 Peace Corps Countries

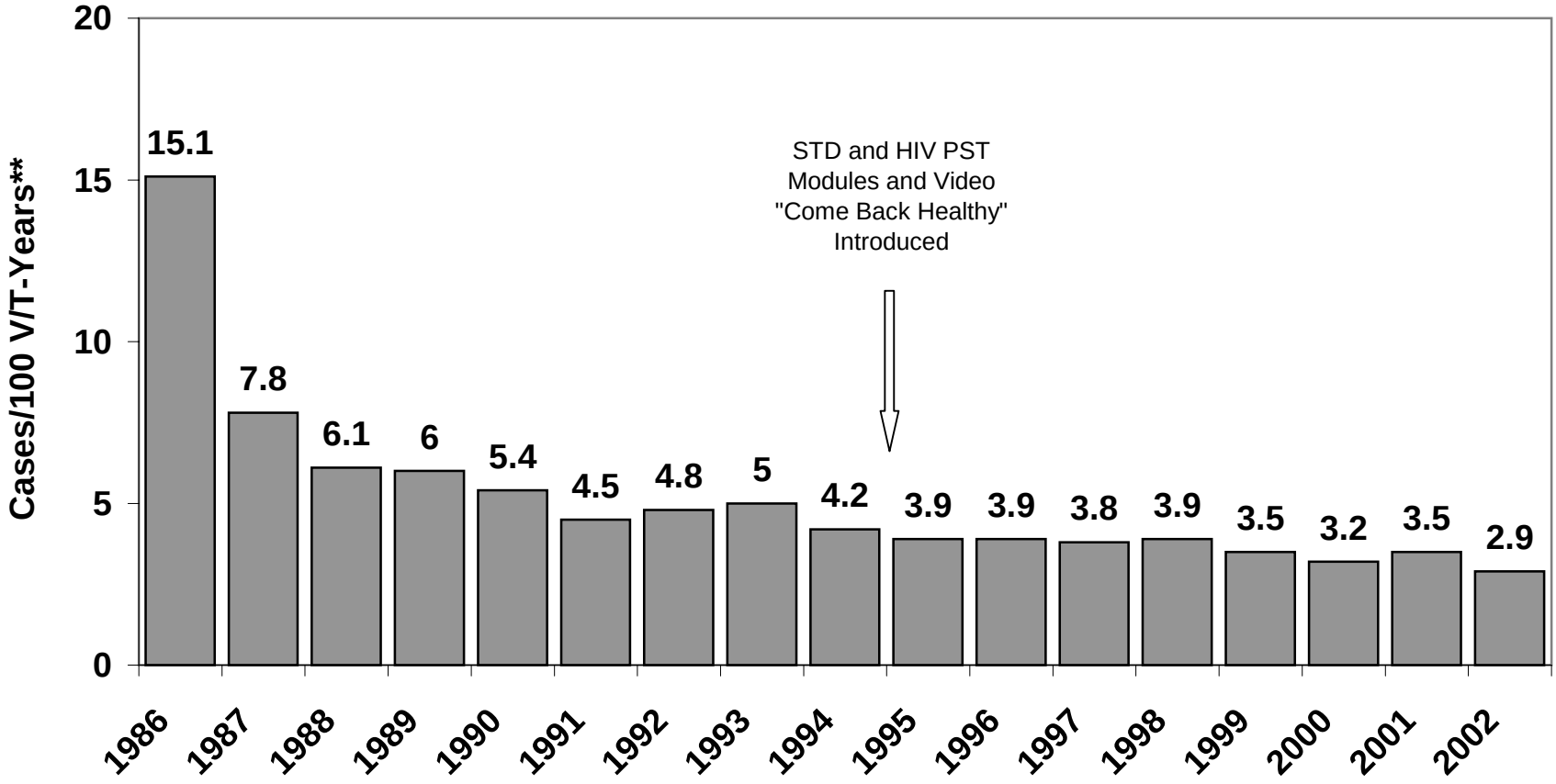


By Region

1986–2002 Volunteer Health Trends

Figure 1

*Incidence of Sexually Transmitted Diseases**



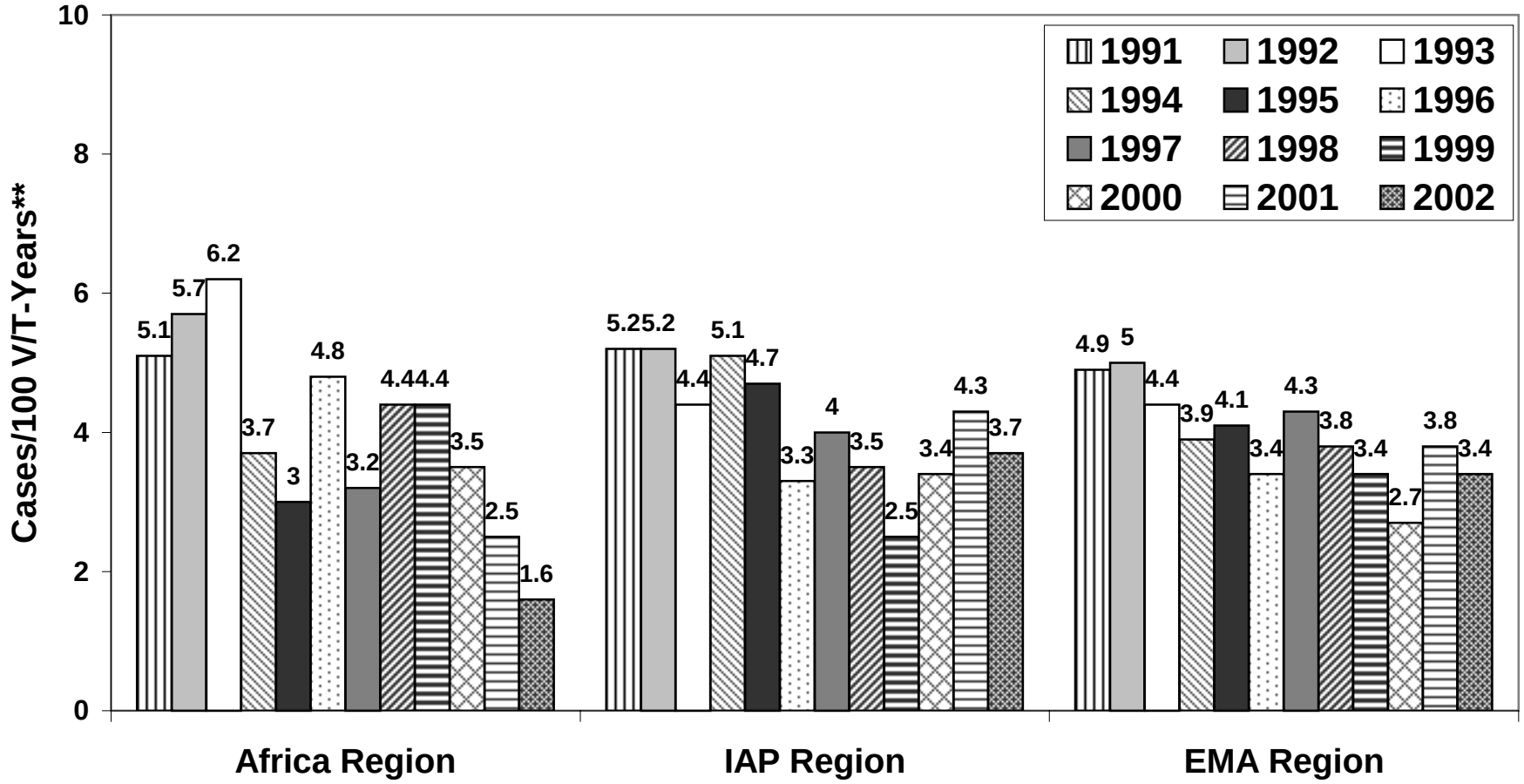
*Includes chlamydia, genital herpes, genital warts, gonorrhea, syphilis, and other STDs

**Prior to 1993, rates per 100 Volunteers/Year were used as an approximation of V/T-Years

1991–2002 Volunteer Health Regional Trends

Figure 2

*Incidence of Sexually Transmitted Diseases**



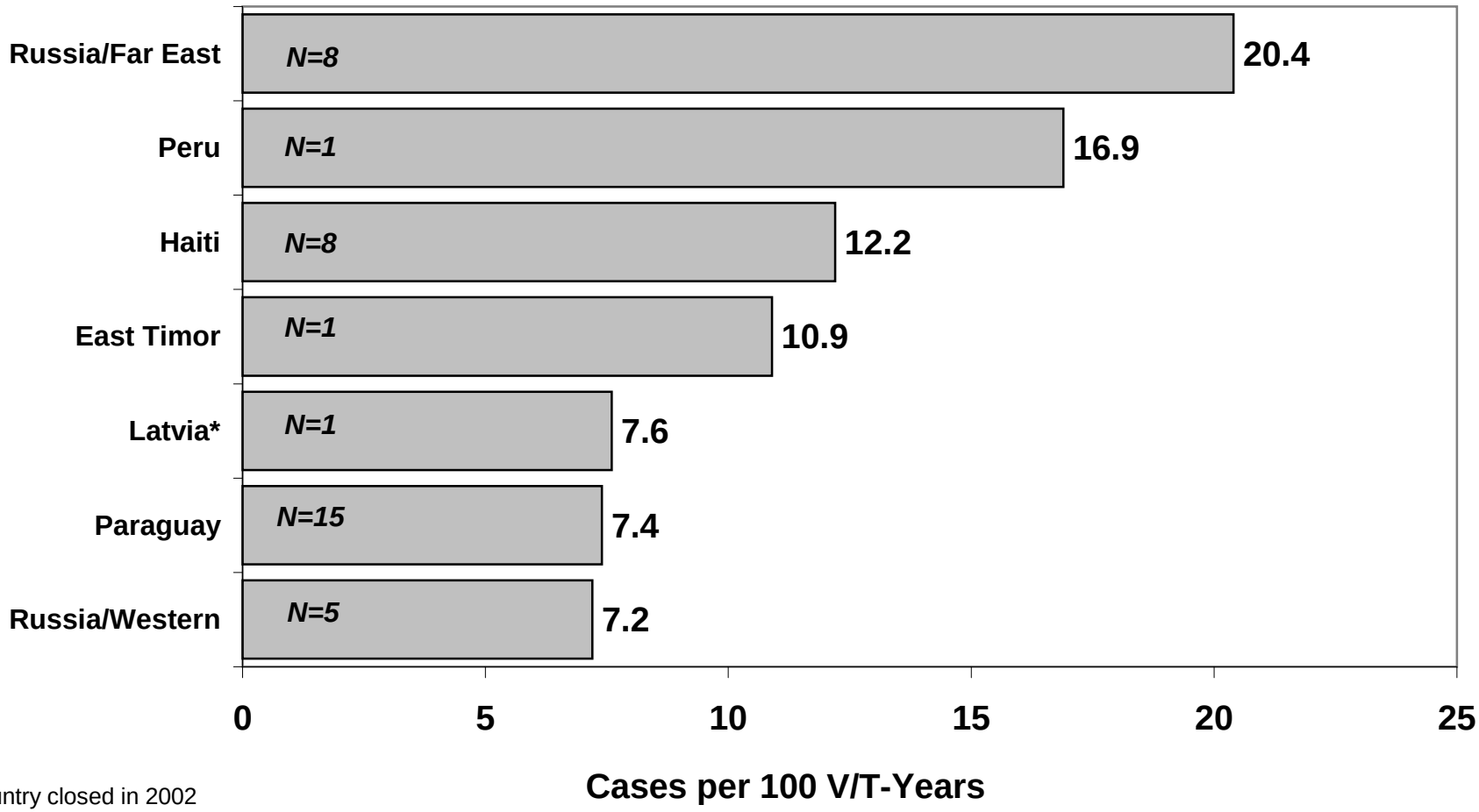
*Includes chlamydia, genital herpes, genital warts, gonorrhea, syphilis, and other STDs

**Prior to 1993, rates per 100 Volunteers/Year were used as an approximation of V/T-Years

2002 Volunteer Health Country Profiles

Figure 3

Highest Incidence of Sexually Transmitted Diseases



*Country closed in 2002

1993–2002 Volunteer Health Trends

Incidence of Hepatitis

Figure 4

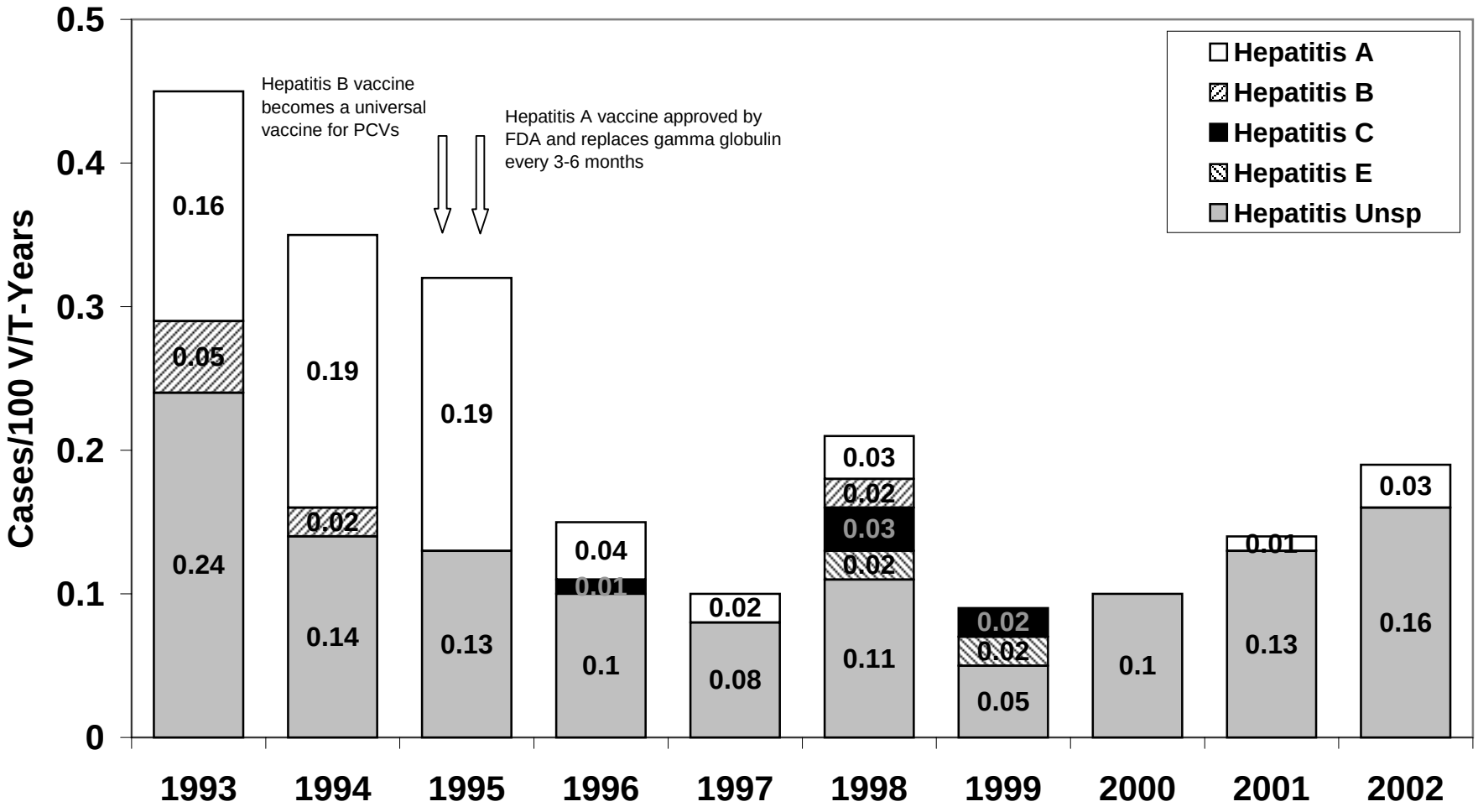
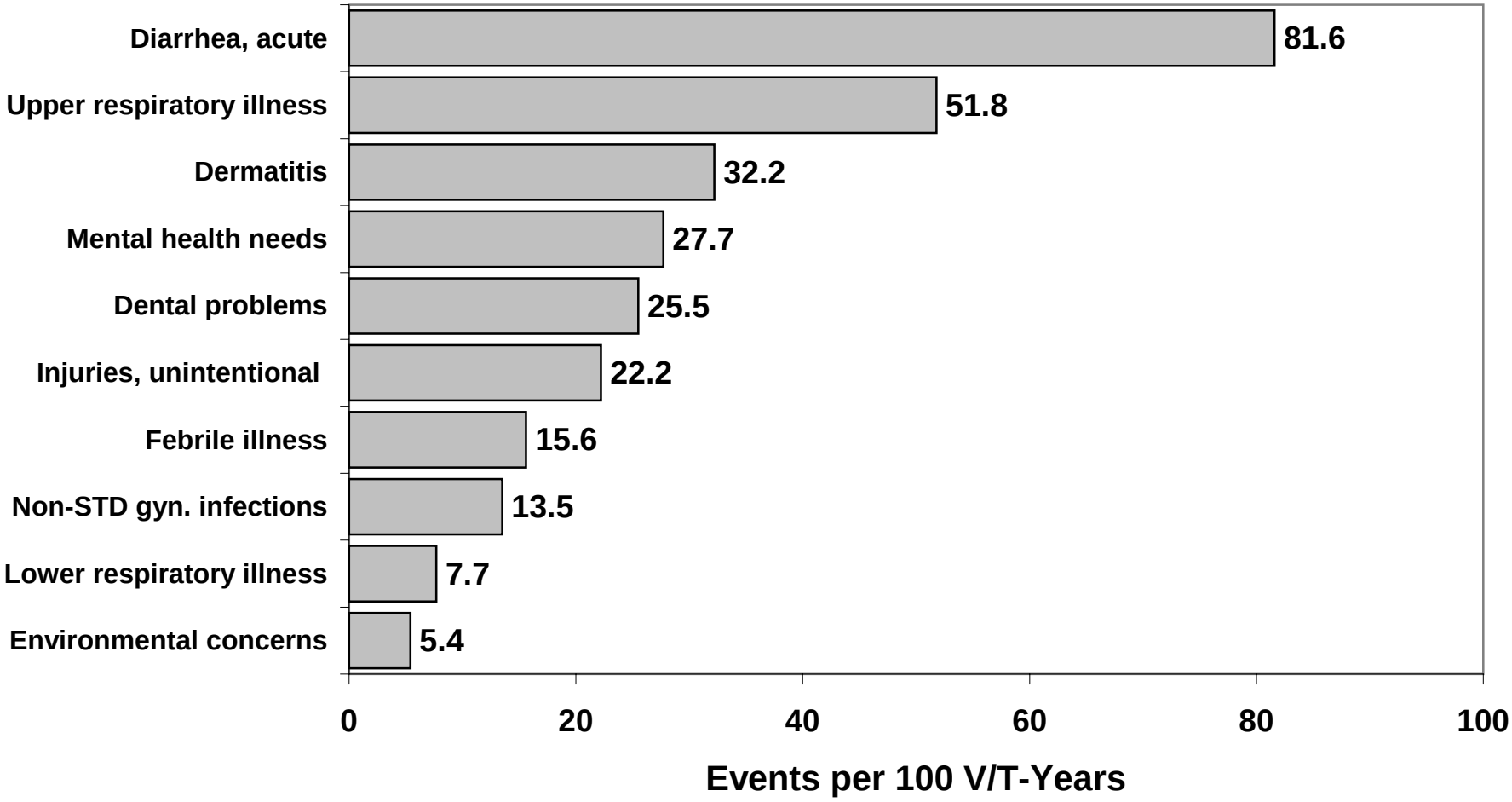


Figure 5

Incidence of the 10 Most Commonly Reported Health-Related Events



2002 Africa Region Volunteer Health Profile

Figure 6

Incidence of the 10 Most Commonly Reported Health-Related Events

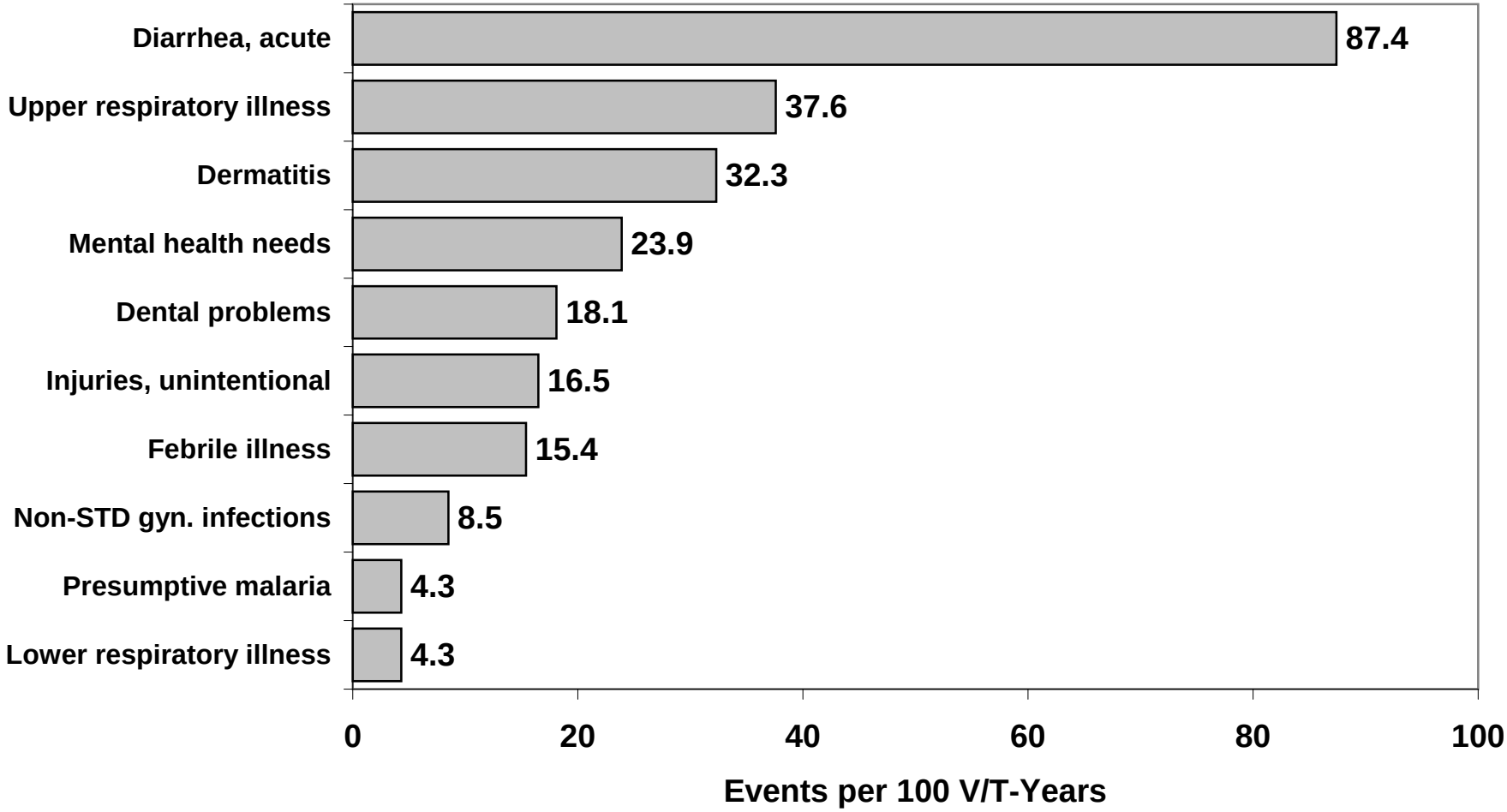
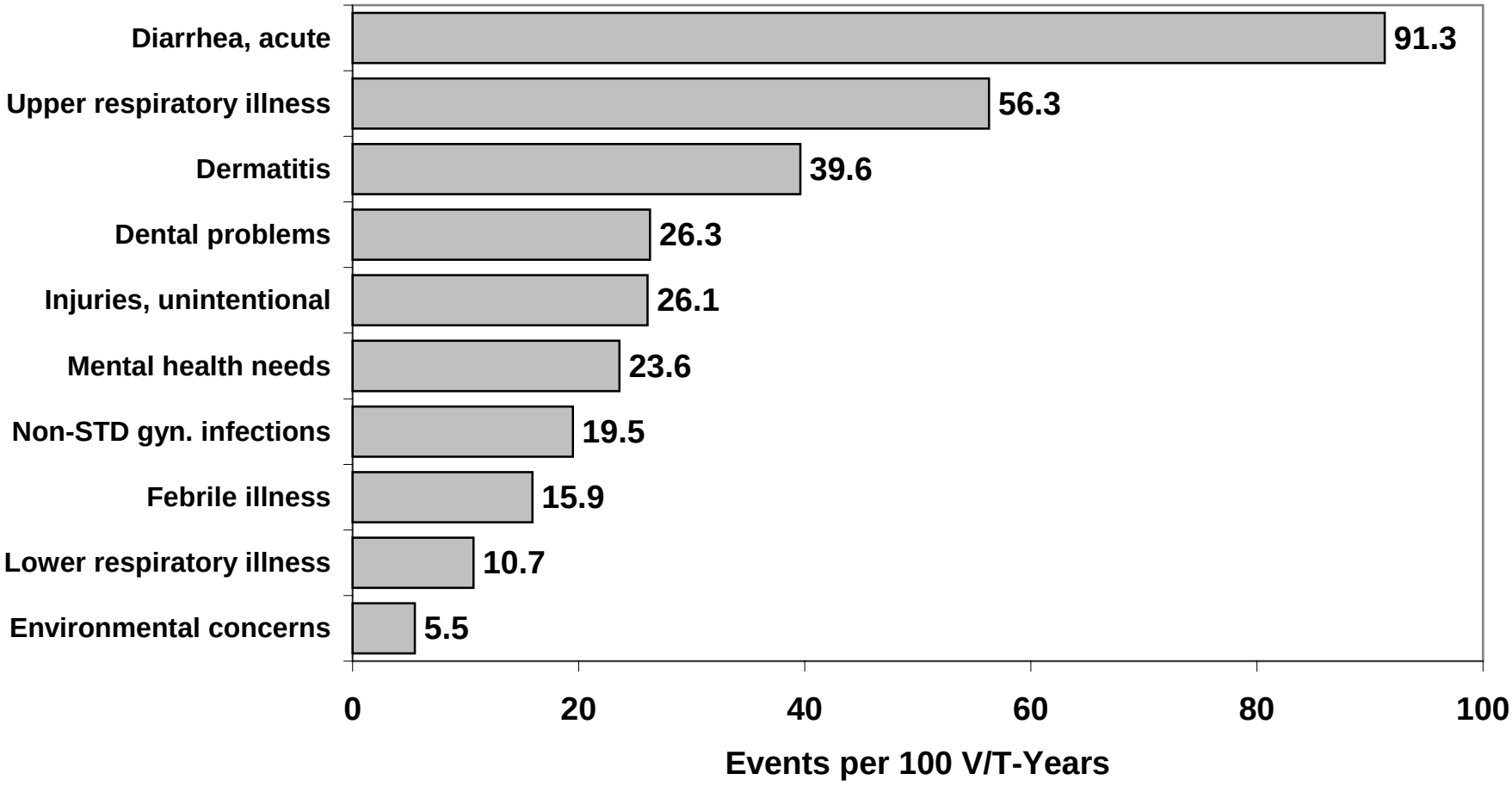


Figure 7

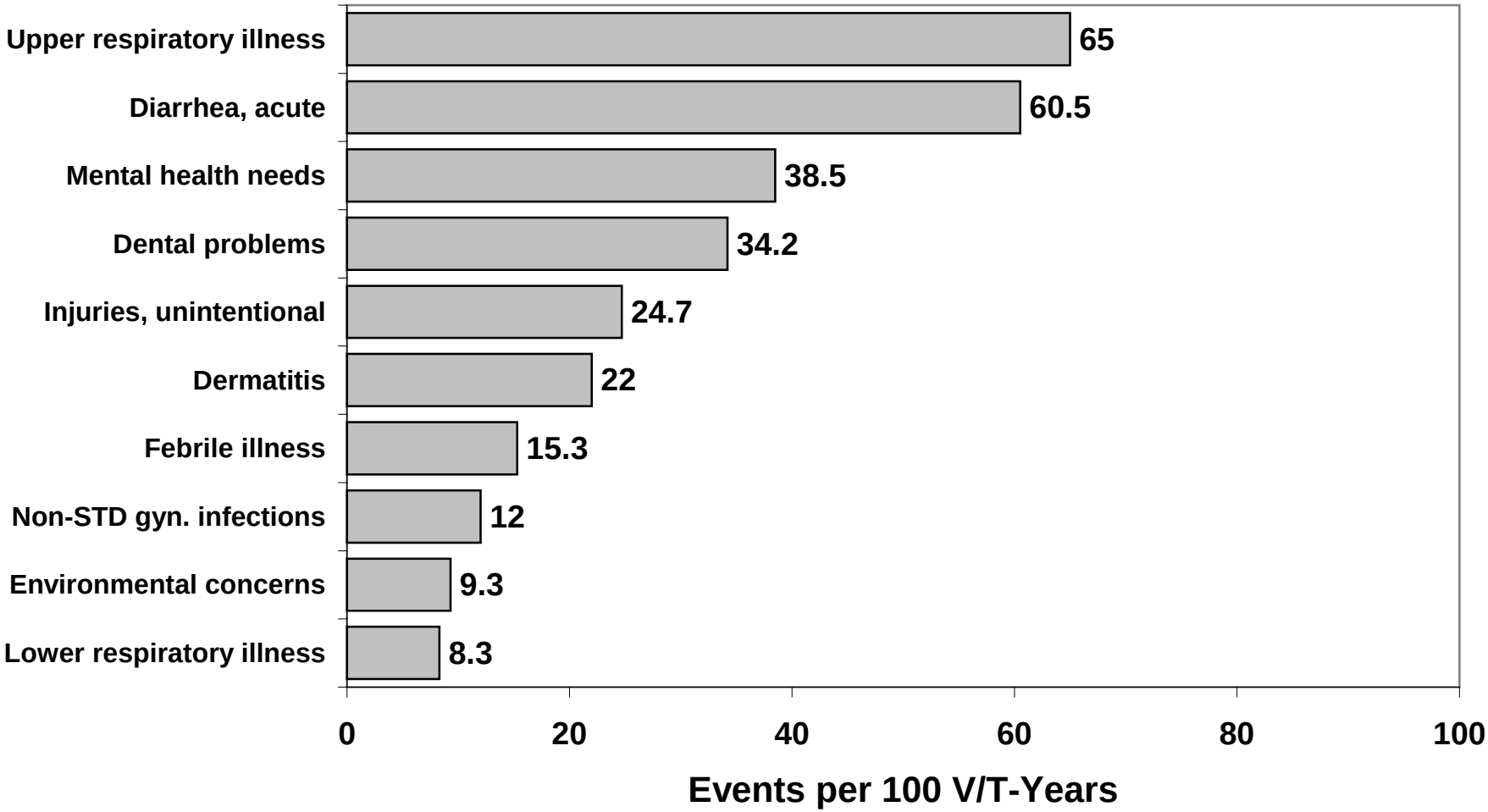
Incidence of the 10 Most Commonly Reported Health-Related Events



2002 Europe, Mediterranean, & Asia Region Volunteer Health Profile

Figure 8

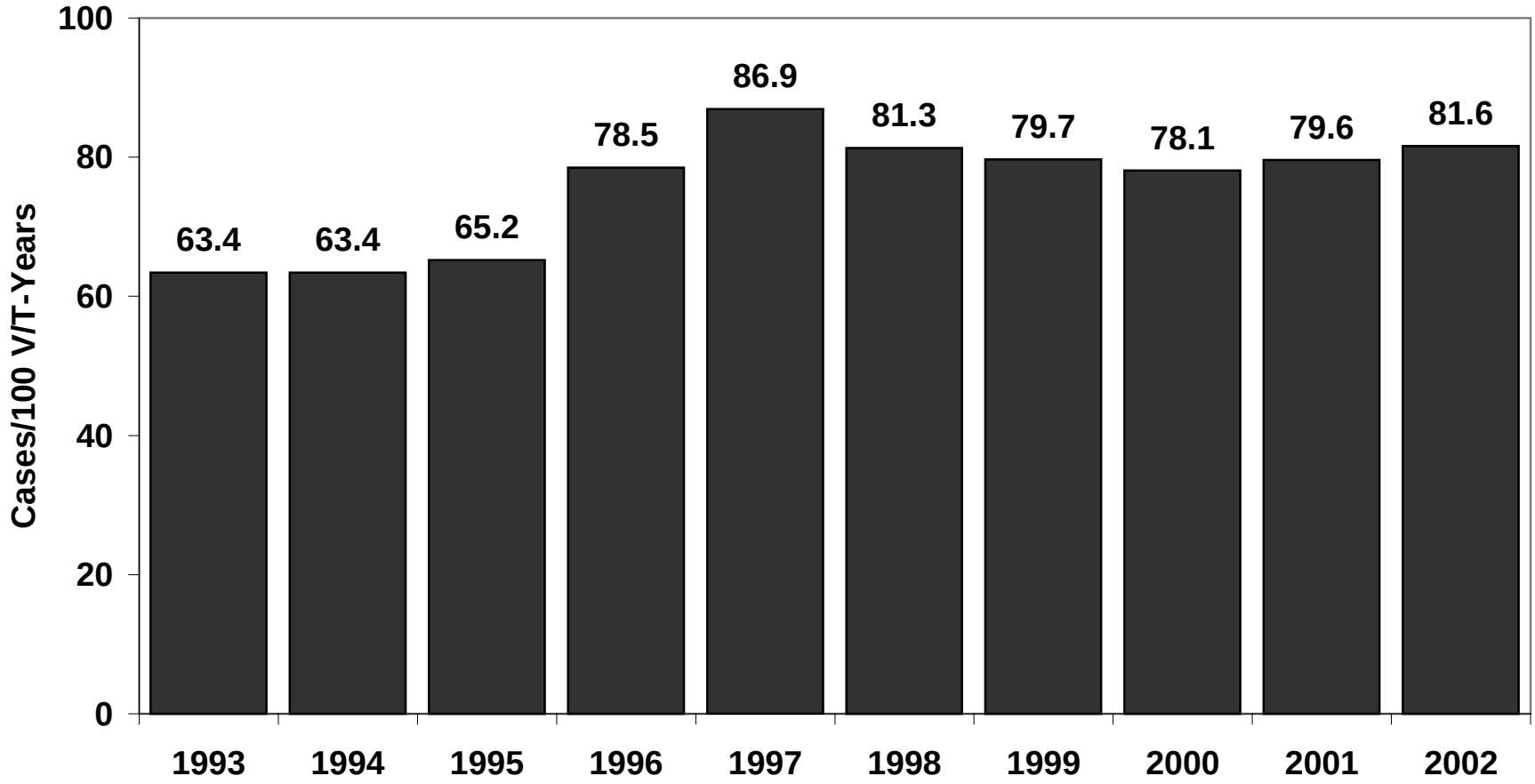
Incidence of the 10 Most Commonly Reported Health-Related Events



1993–2002 Volunteer Health Trends

Figure 9

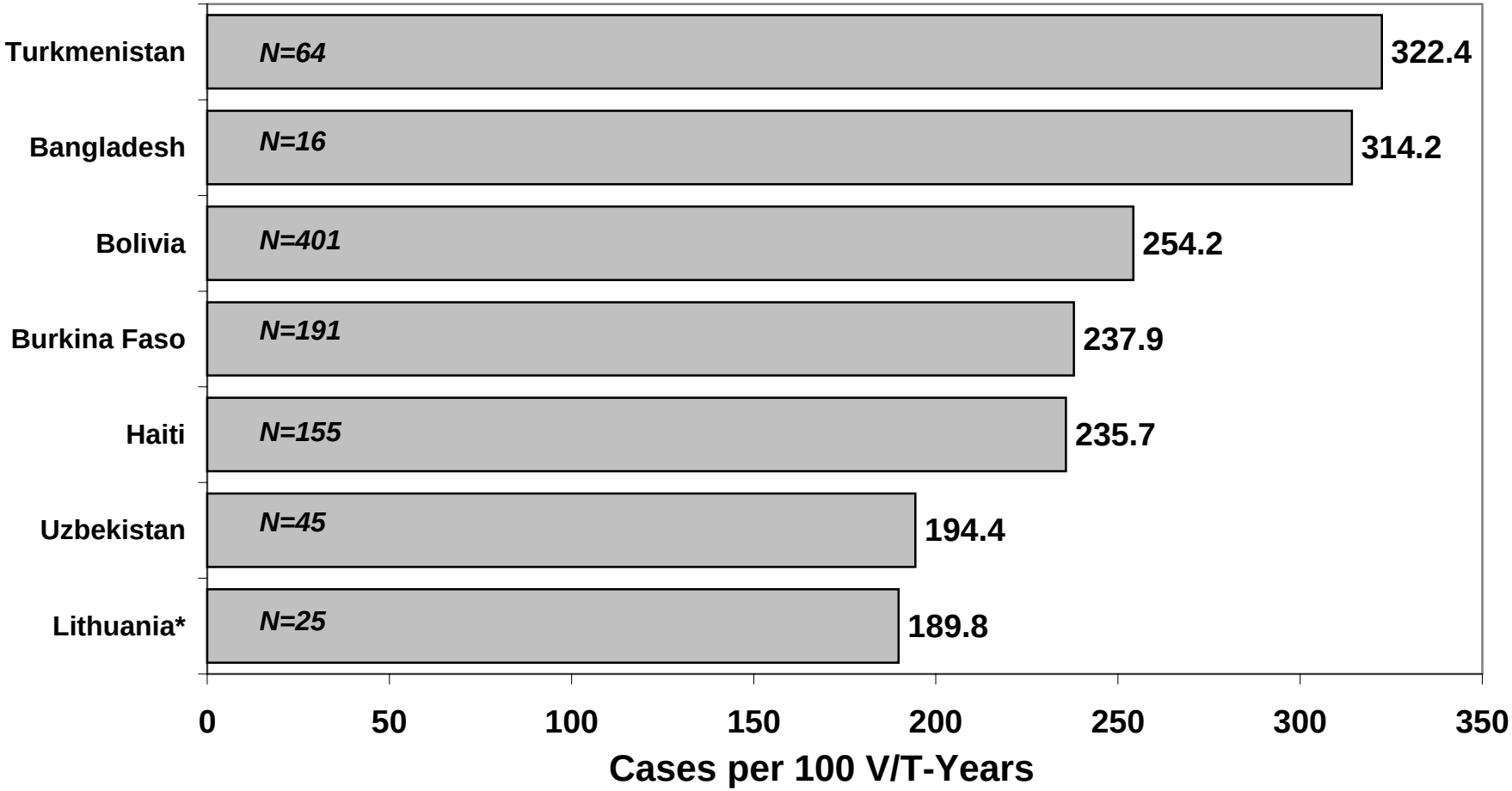
Incidence of Acute Diarrhea



2002 Volunteer Health Country Profiles

Figure 10

Highest Incidence of Acute Diarrhea



*Country closed in 2002

1995–2002 Volunteer Health Trends

Figure 11

Incidence of Upper Respiratory Tract Illnesses

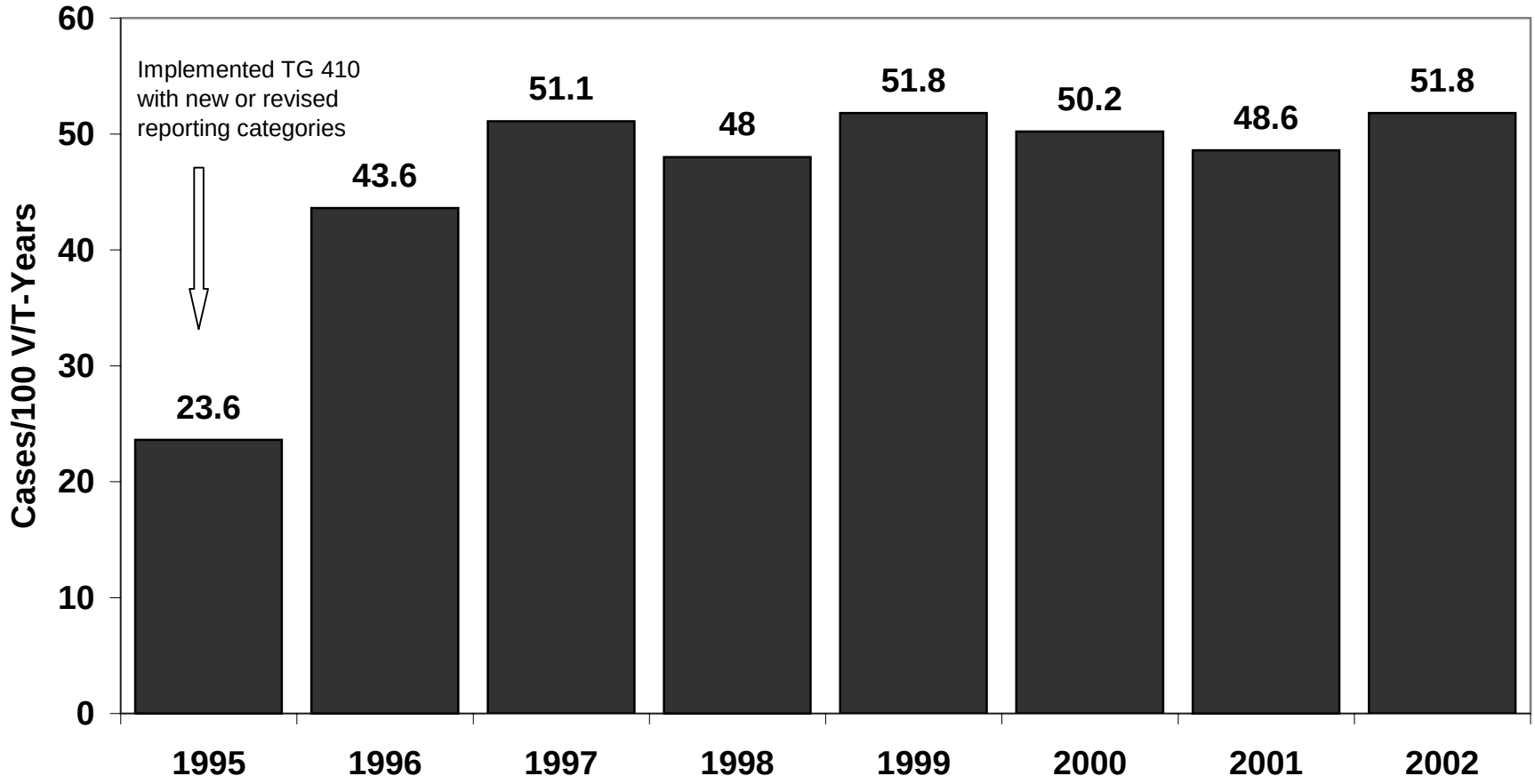
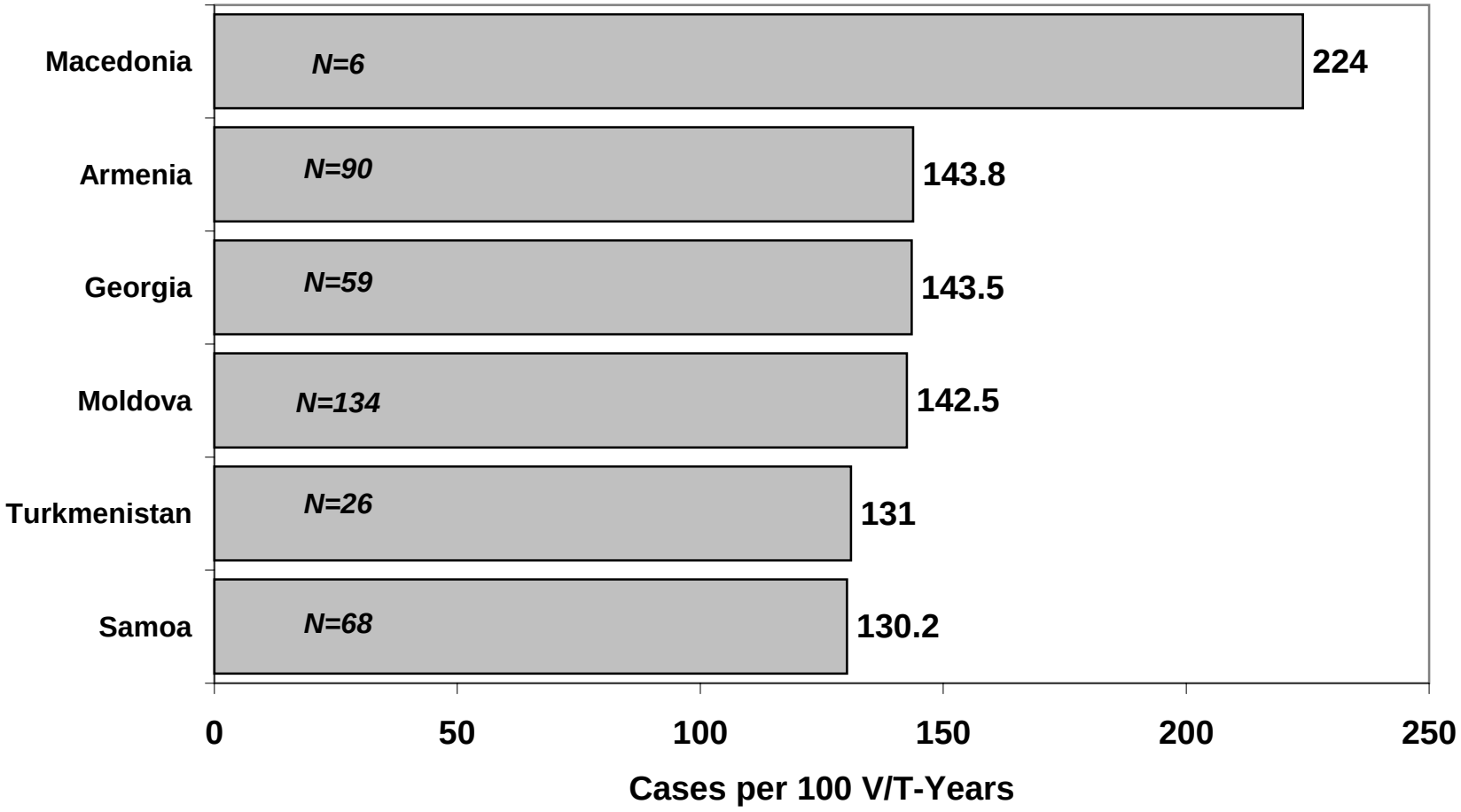


Figure 12

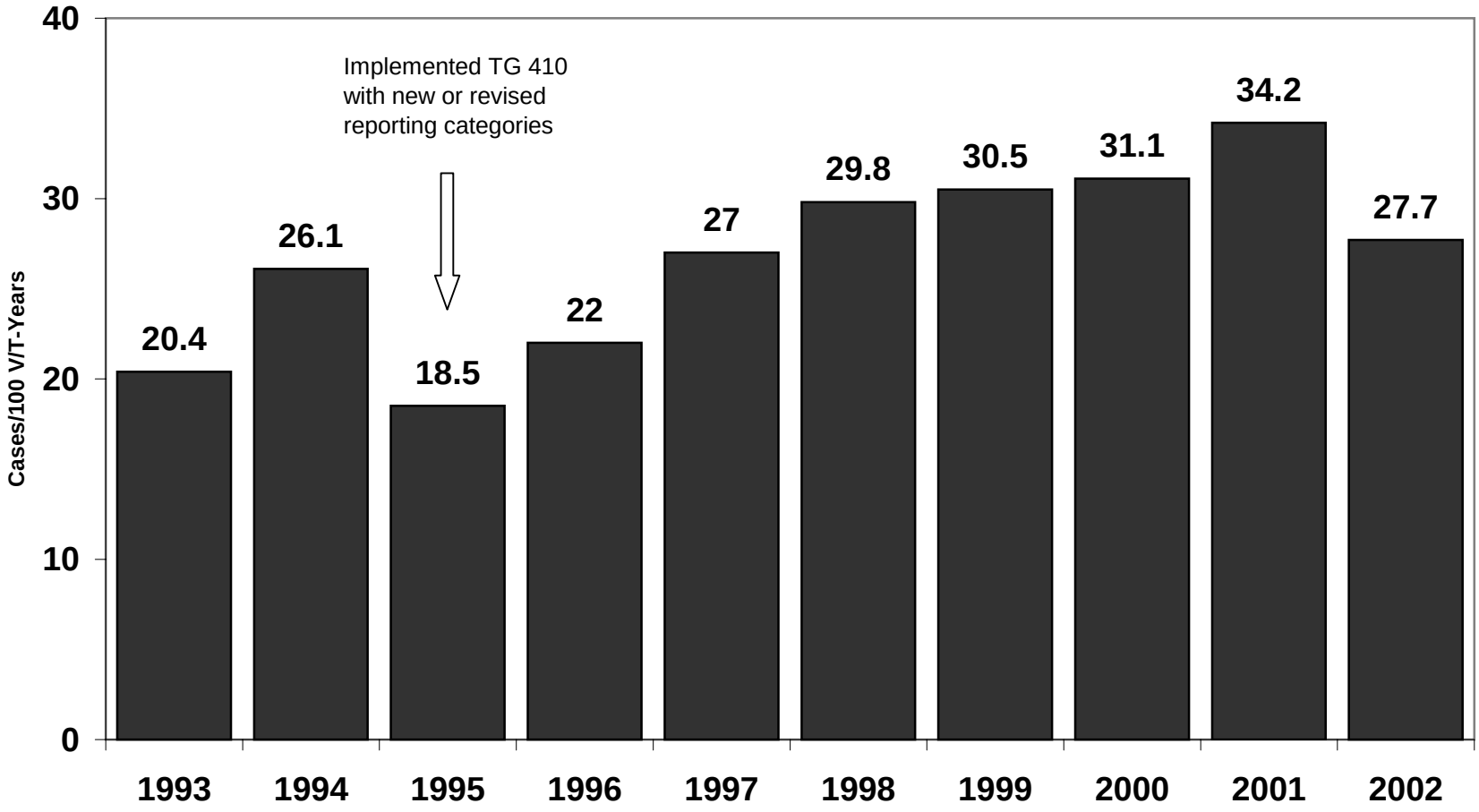
Highest Incidence of Upper Respiratory Tract Illnesses



1993–2002 Volunteer Health Trends

Figure 13

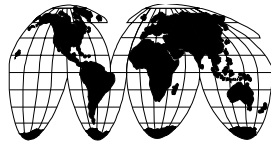
Incidence of Mental Health Needs

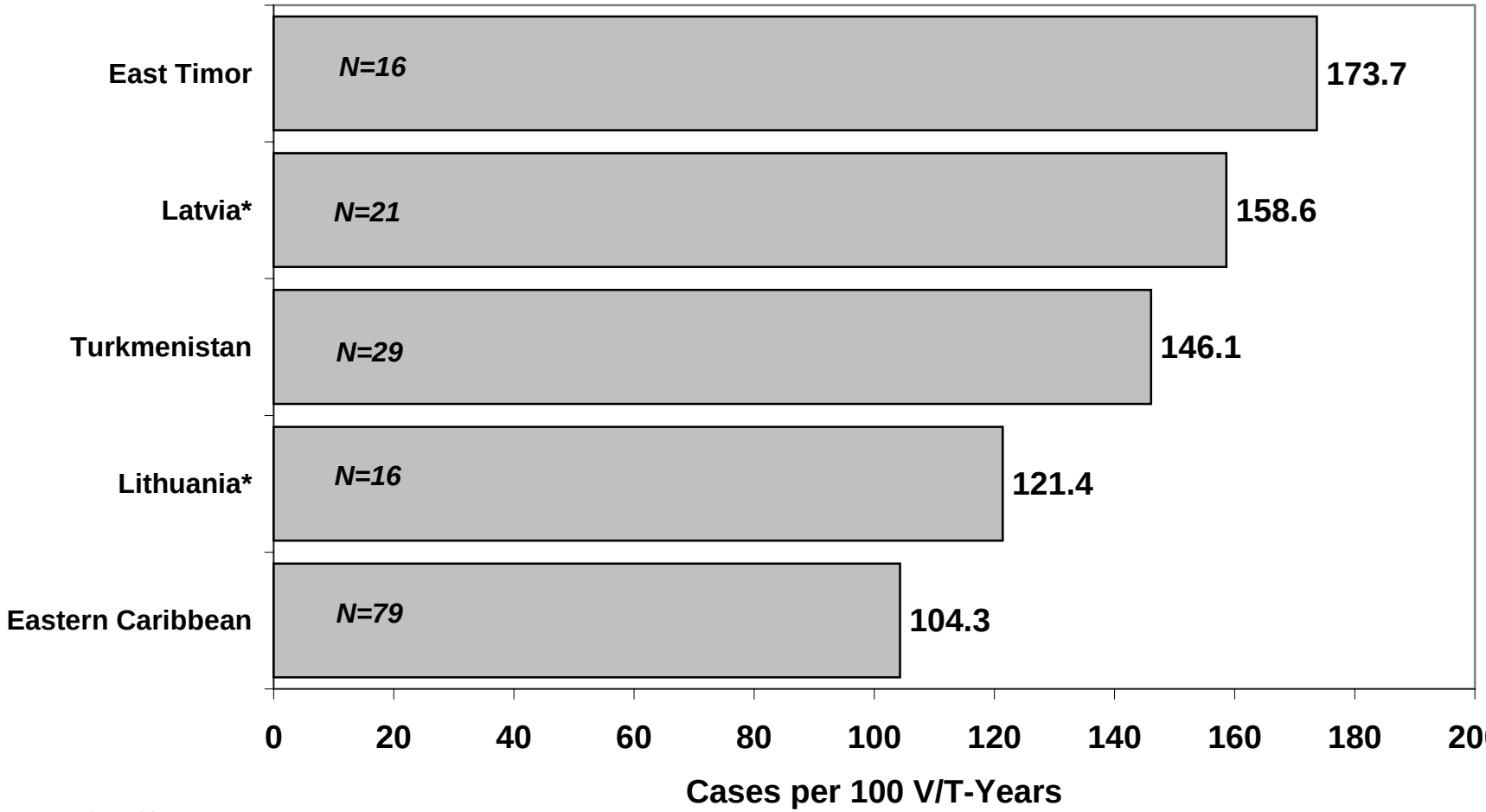


2002 Volunteer Health Country Profiles

Figure 14

Highest Incidence of Mental Health Needs





*Country closed in 2002

1993–2001 Volunteer Health Trends

Figure 15

Incidence of Dental Problems

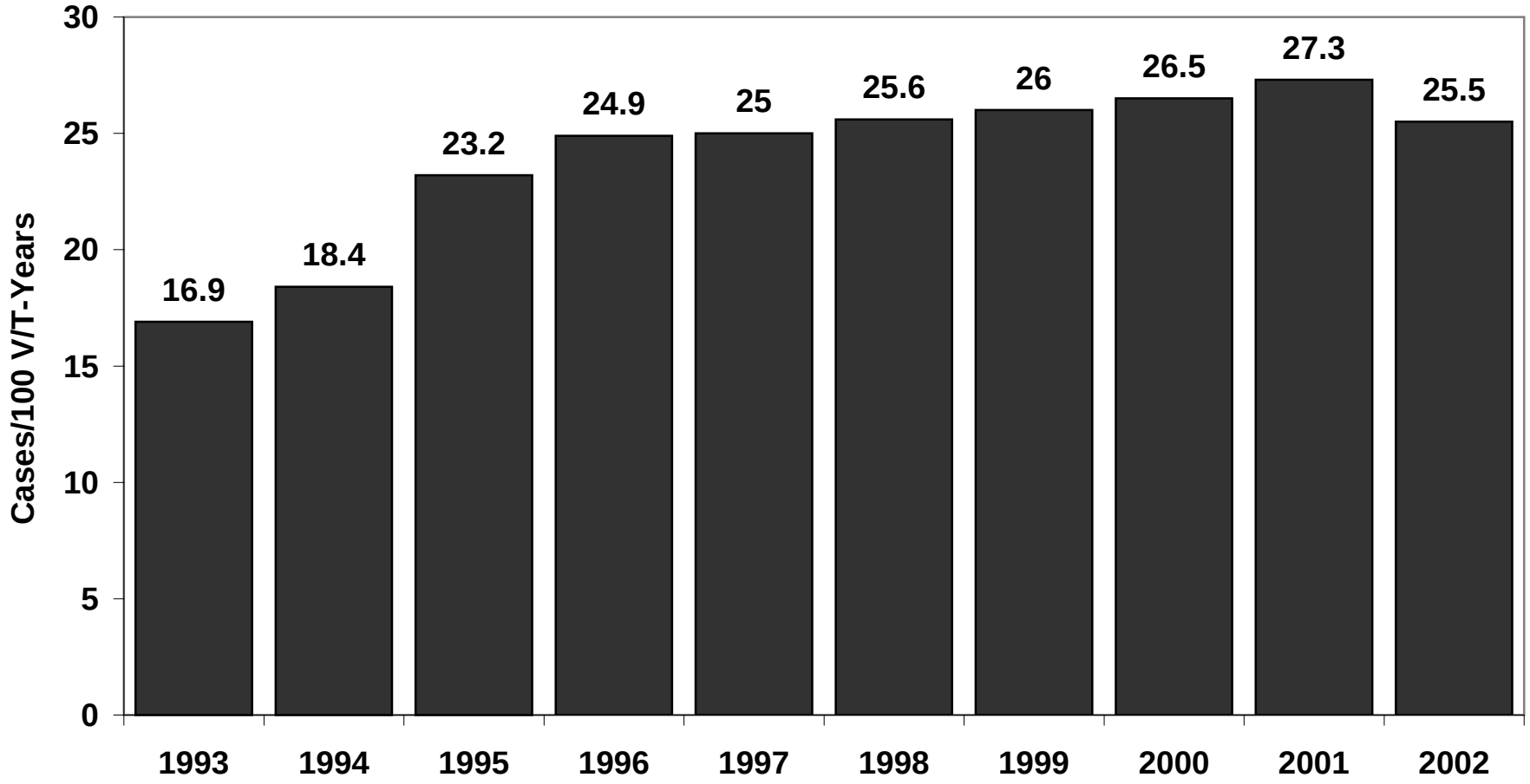
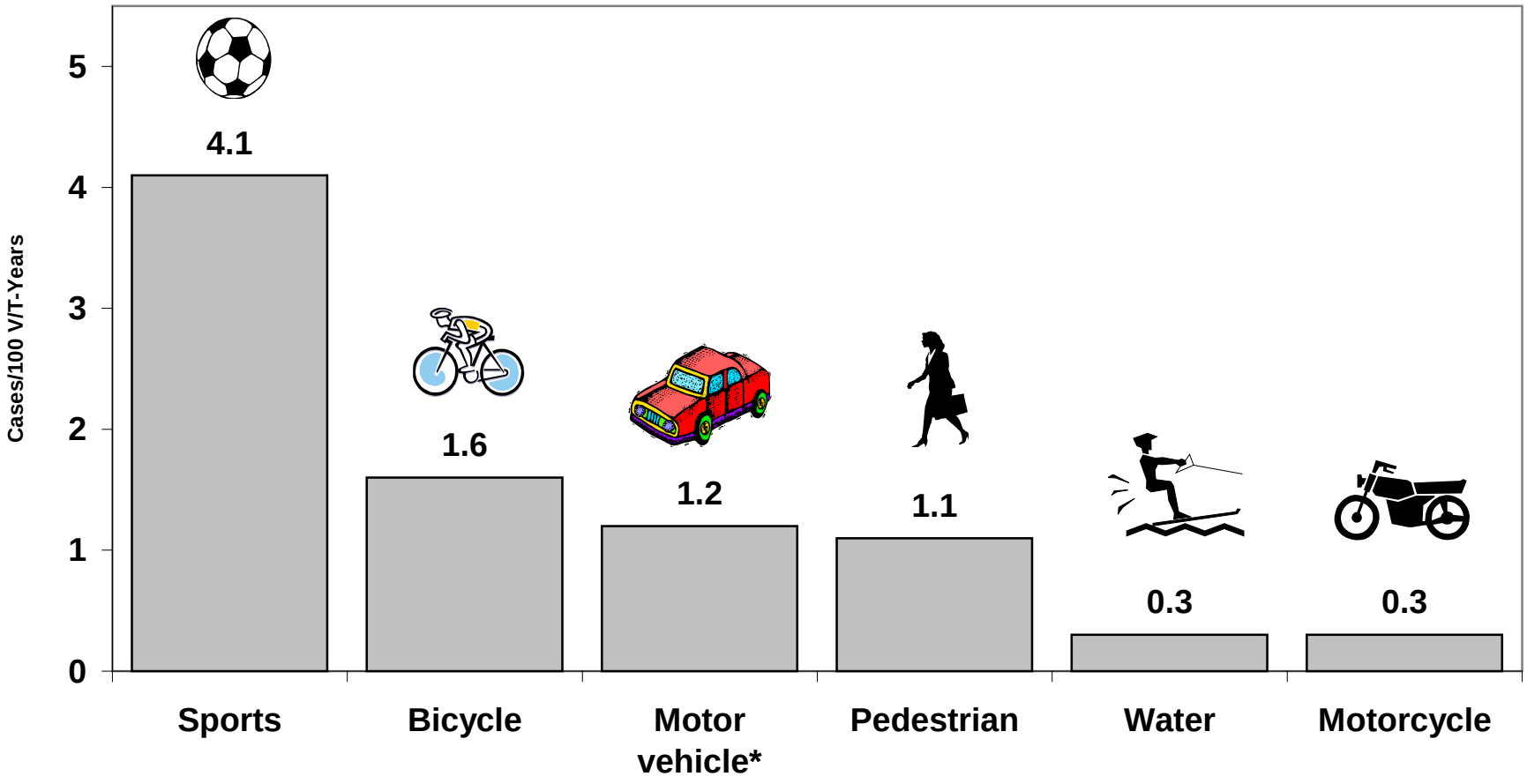


Figure 16

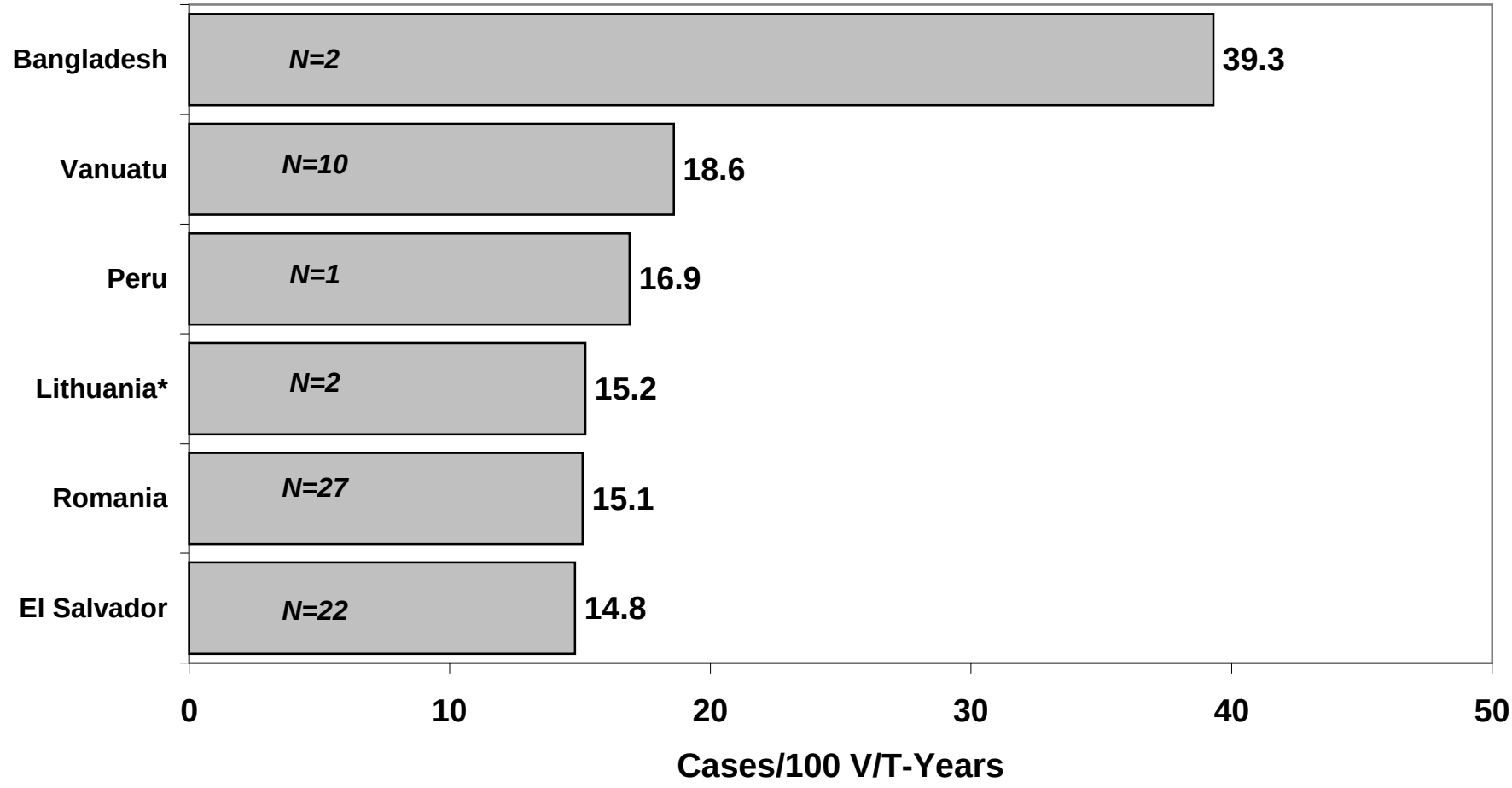
Incidence of Unintentional Injuries



*Includes all motor vehicles other than motorcycles or motorboats

Figure 17

Highest Incidence of Sports-Related Injuries



*Country closed in 2002

Figure 18

Highest Incidence of Bicycle Injuries

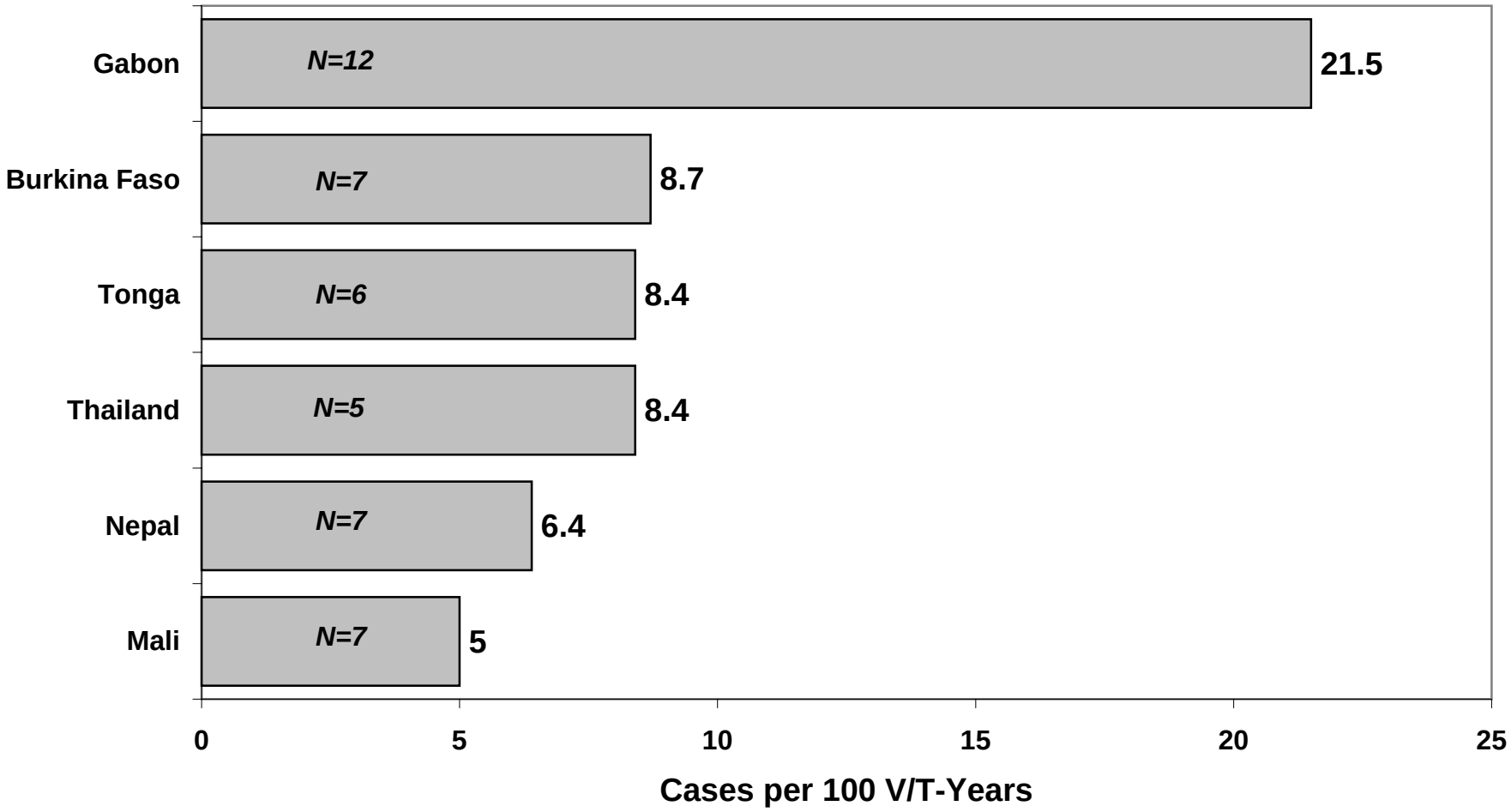
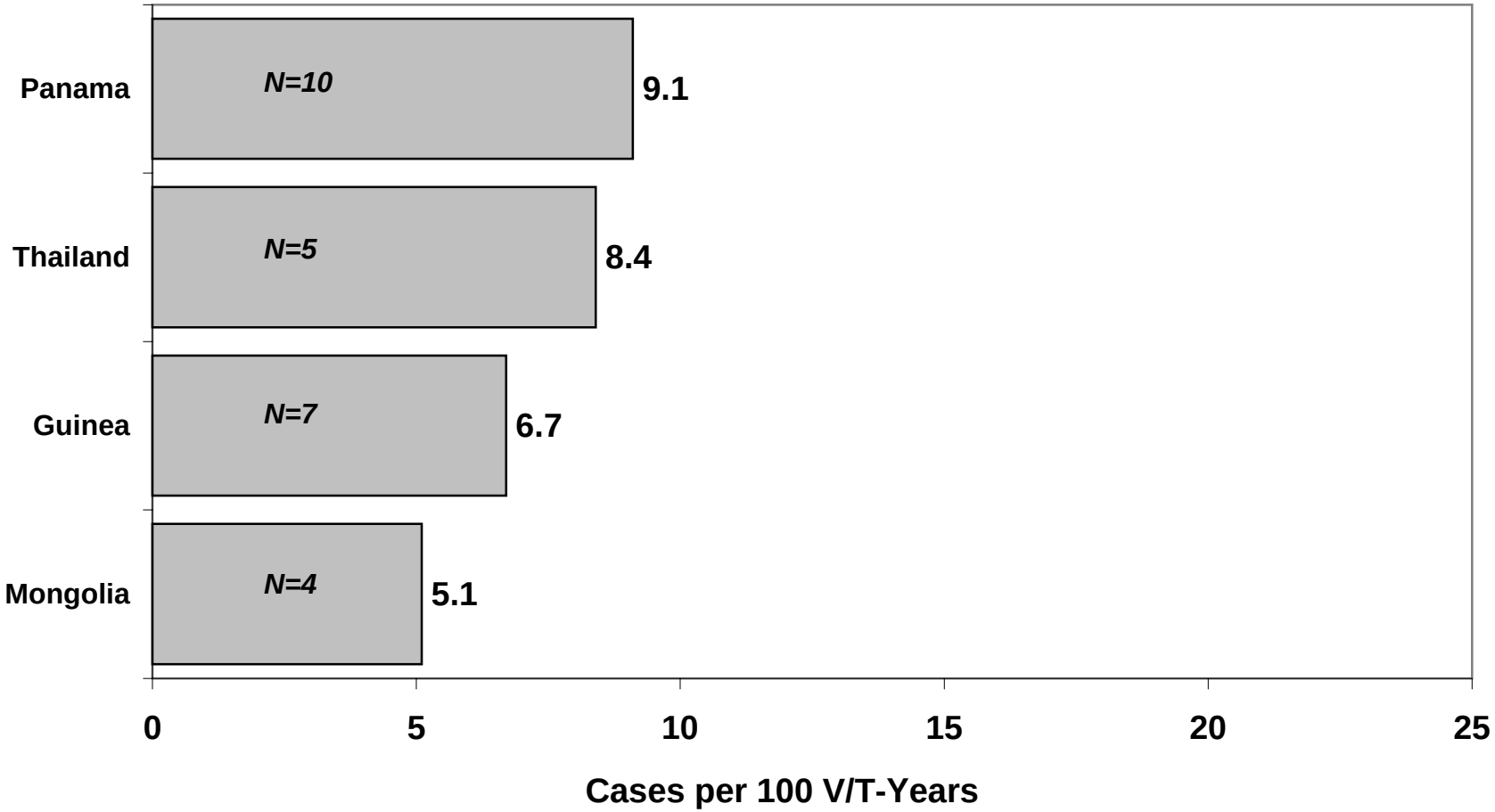


Figure 19

Highest Incidence of Motor Vehicle Injuries*

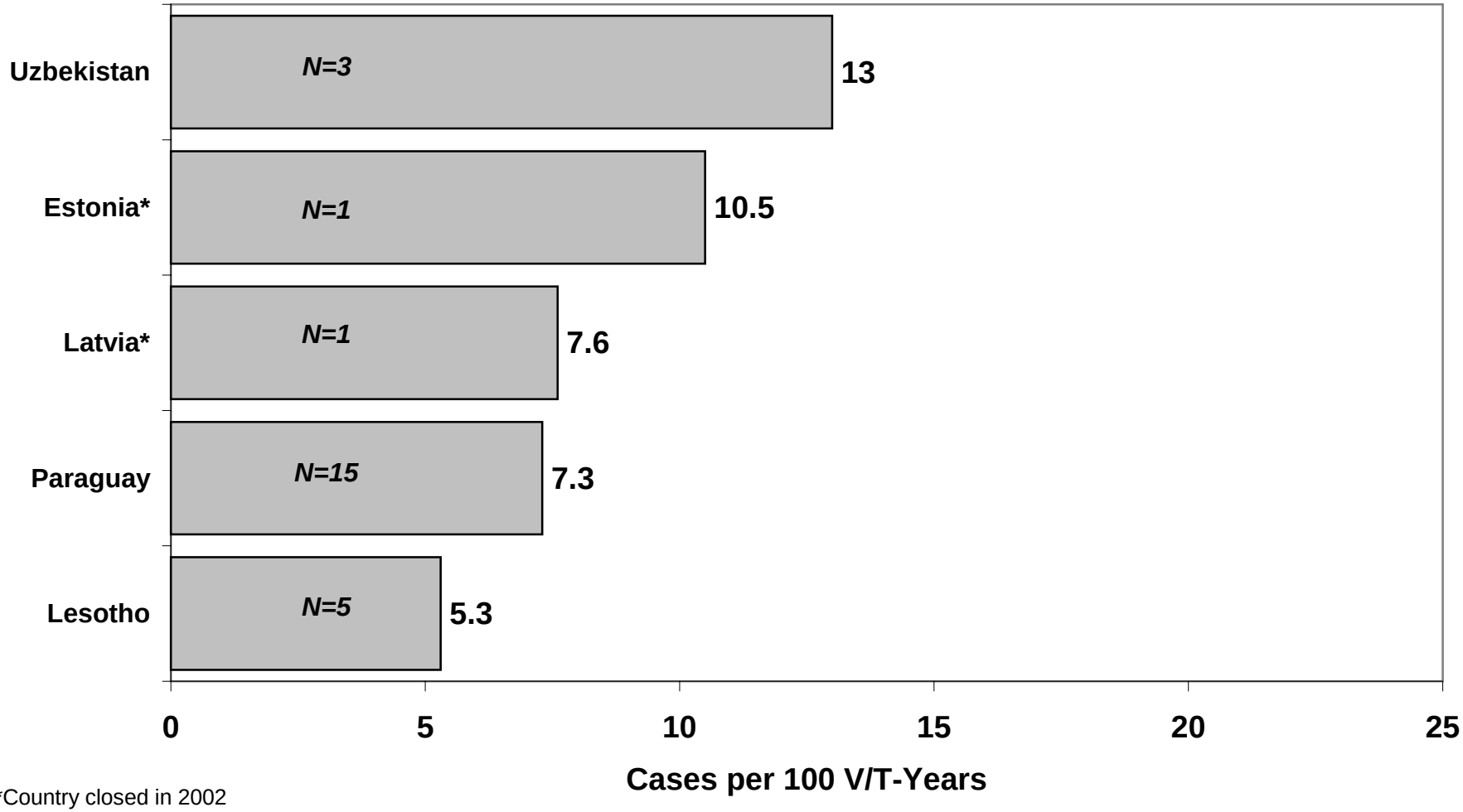


*Does not include motorcycles

2002 Volunteer Health Country Profiles

Figure 20

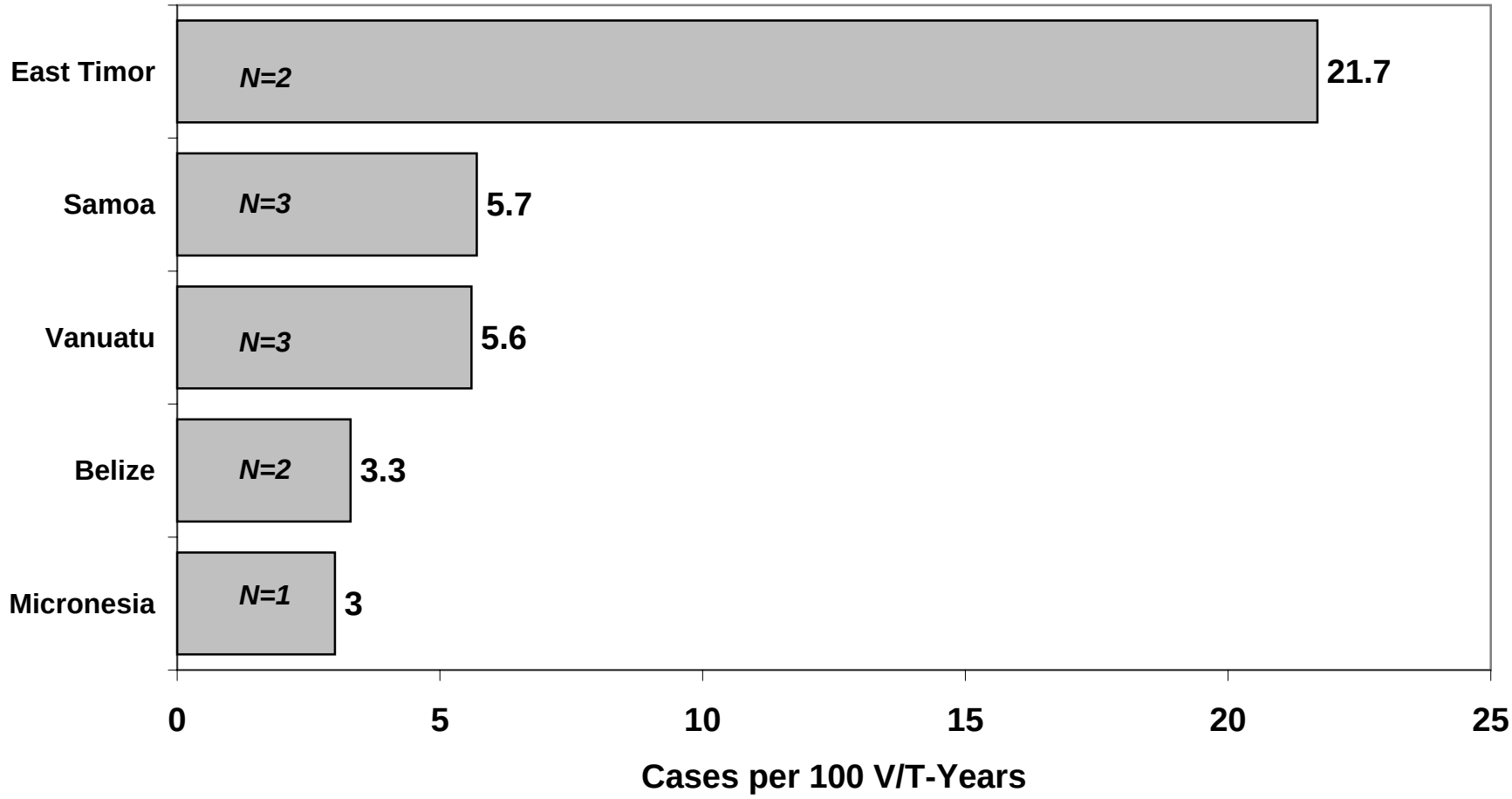
Highest Incidence of Pedestrian Injuries



*Country closed in 2002

Figure 21

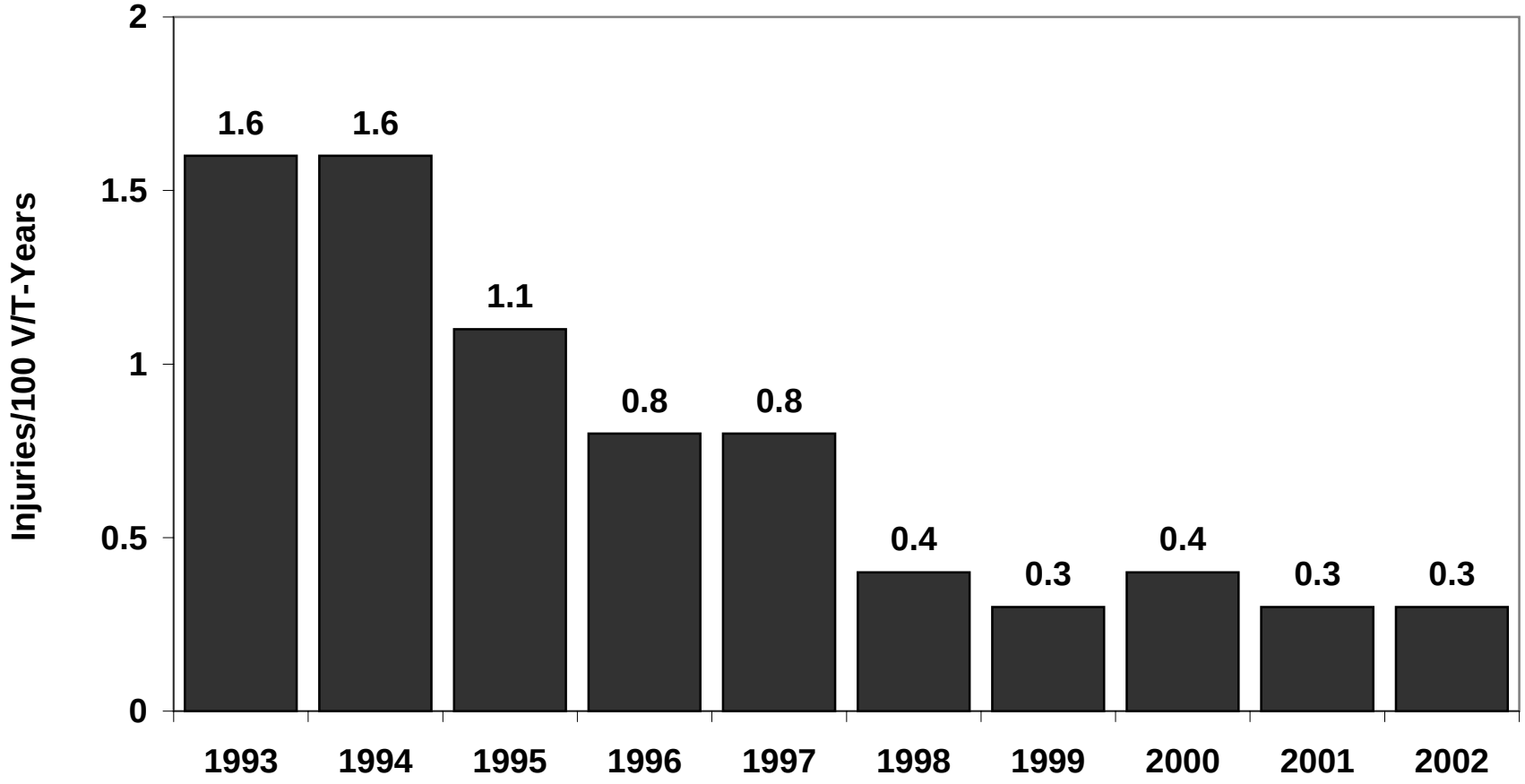
Highest Incidence of Water-Related Injuries



1993–2002 Volunteer Health Trends

Figure 22

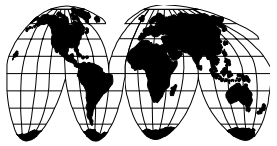
Incidence of Motorcycle Injuries

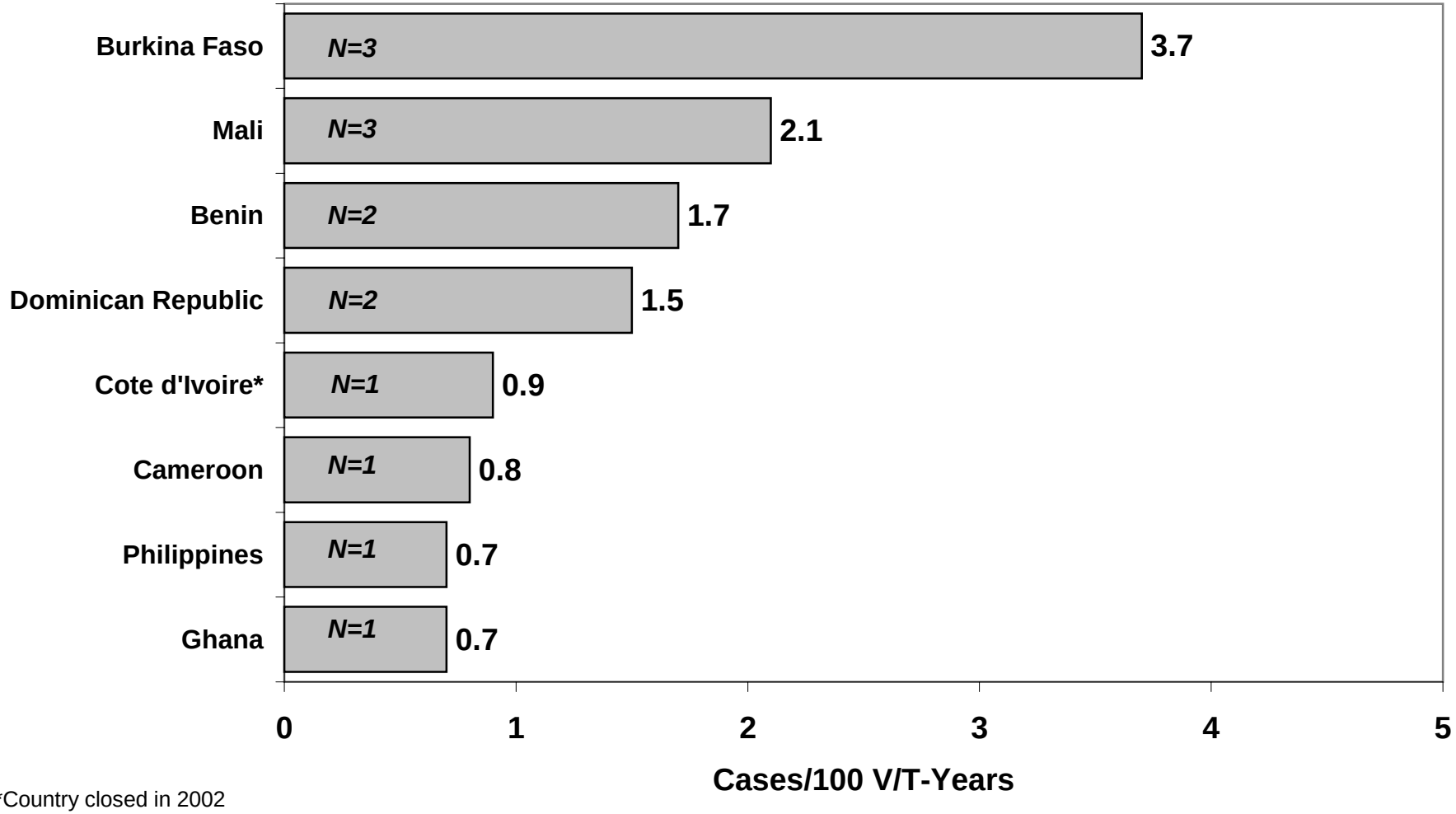


2002 Volunteer Health Country Profiles

Figure 23

Highest Incidence of Motorcycle Injuries



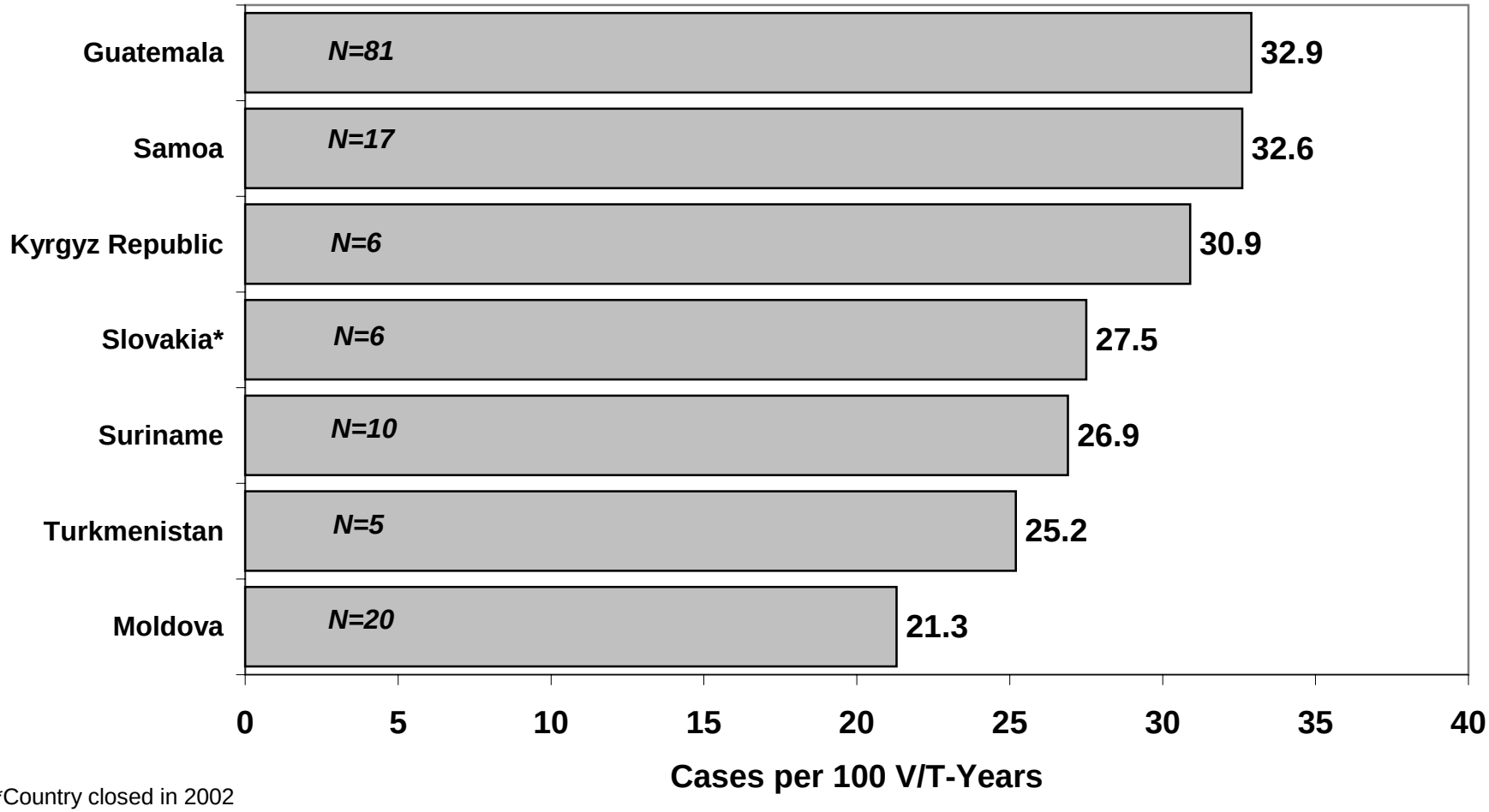


*Country closed in 2002

2002 Volunteer Health Country Profiles

Figure 24

Highest Incidence of Lower Respiratory Tract Illness



*Country closed in 2002

1993–2002 Volunteer Health Trends

Figure 25

Incidence of Environmental Concerns

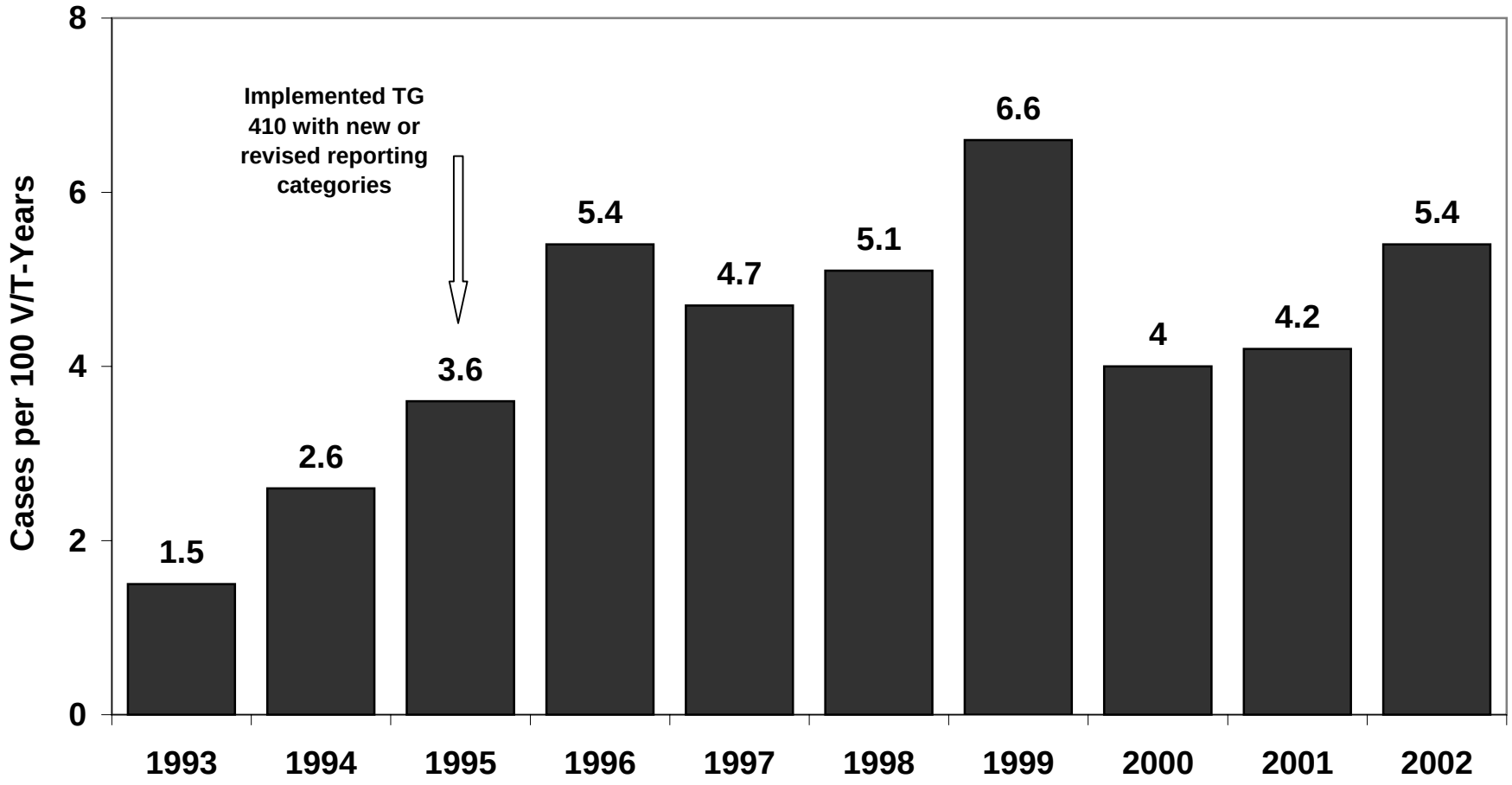
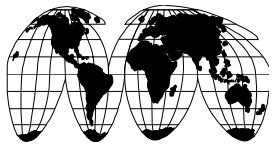
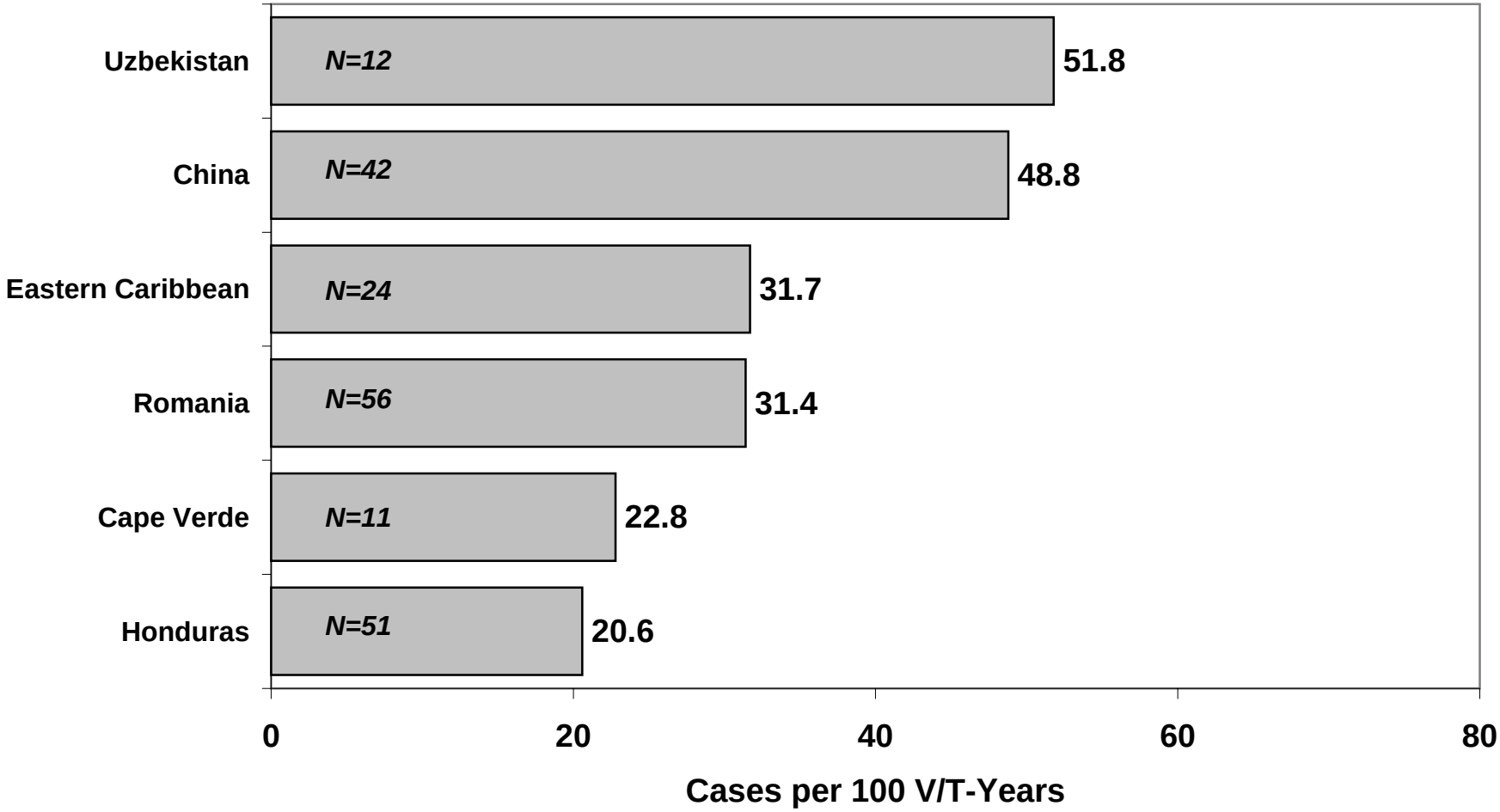


Figure 26

Highest Incidence of Environmental Concerns

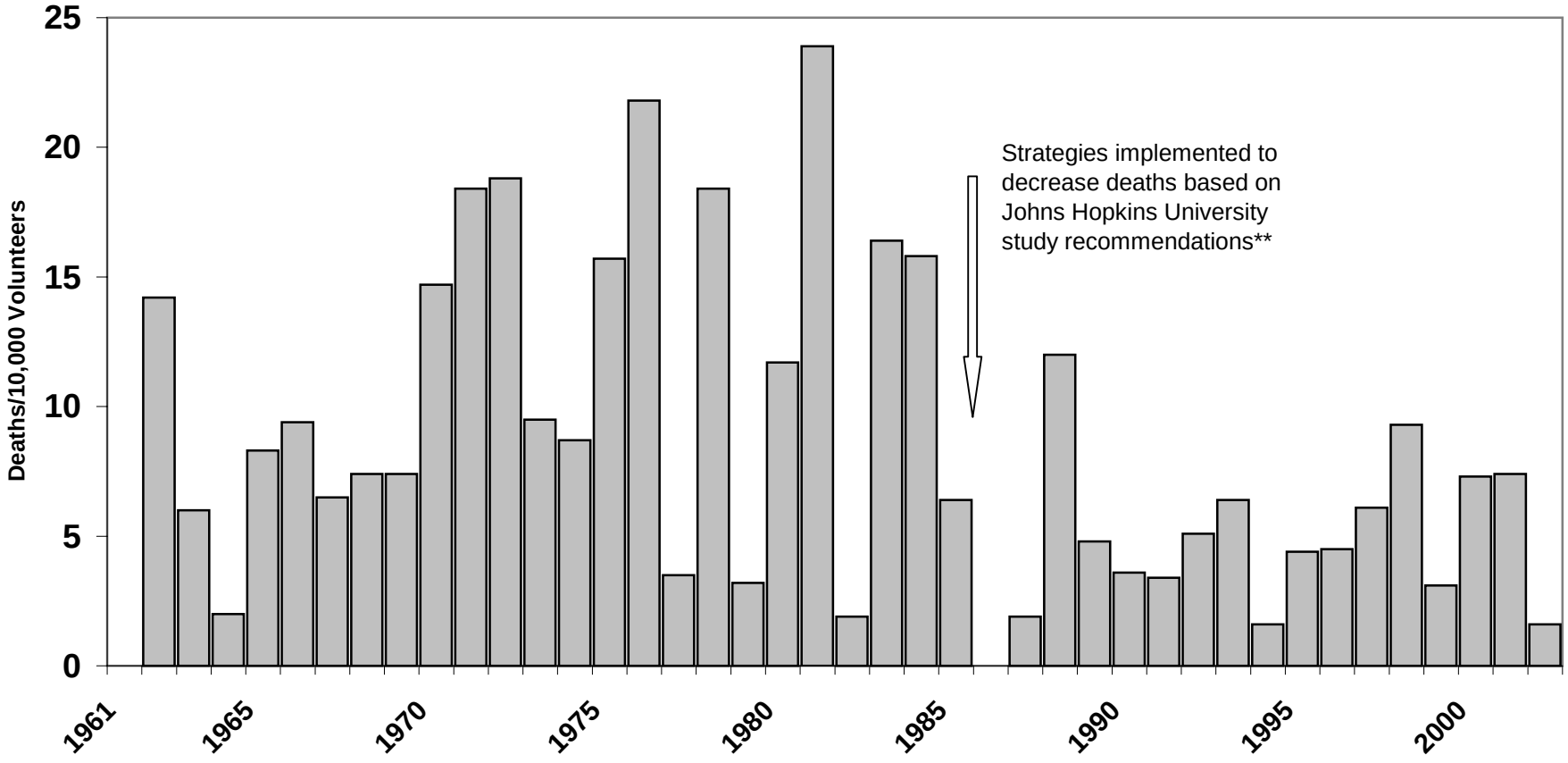




1961–2002 Volunteer Health Trends

Figure 27

*Mortality Rates**



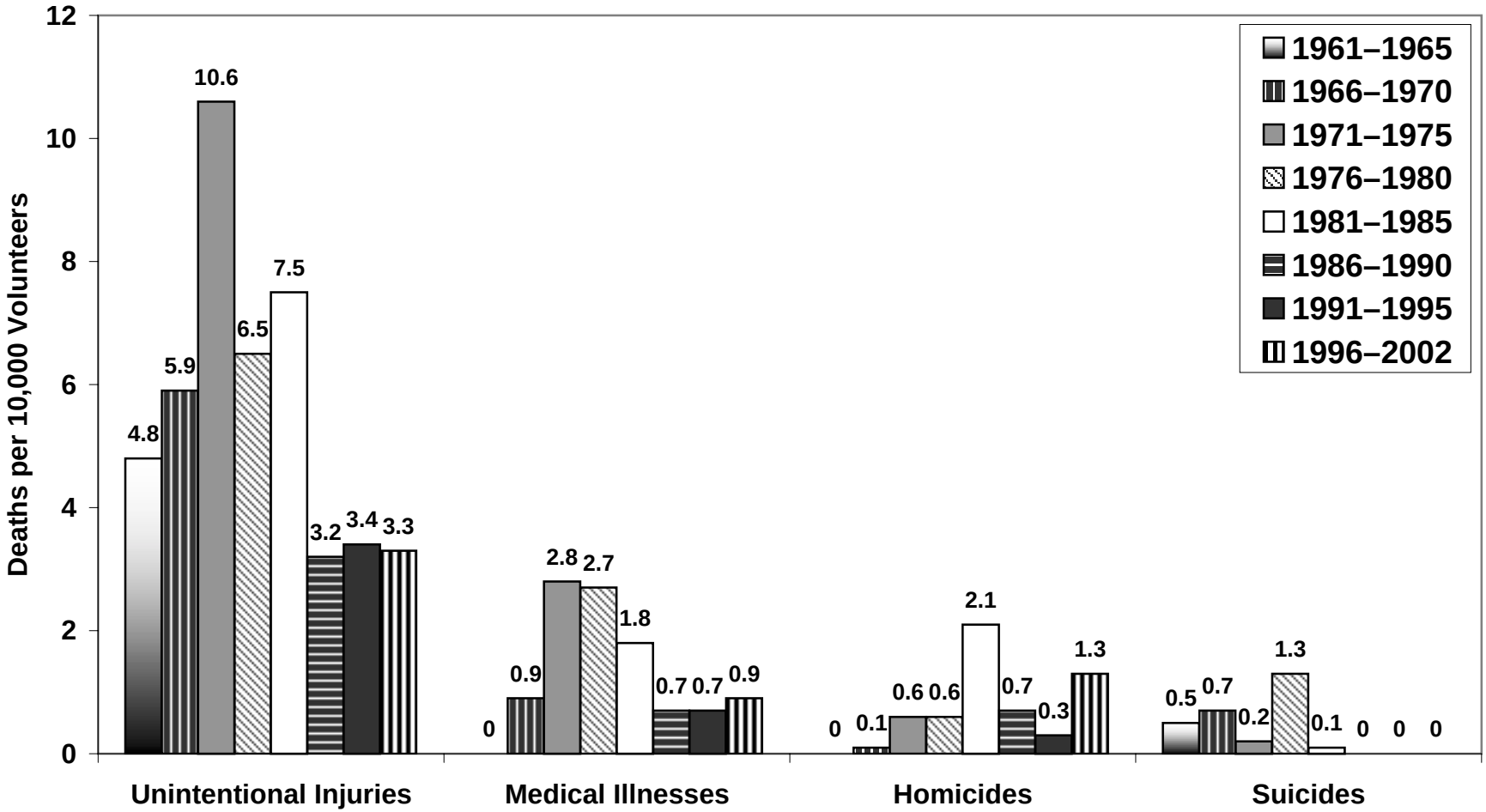
* Rate=deaths per 10,000 Volunteers

**Hargarten SW and Baker SP. 1985. Fatalities in the Peace Corps. JAMA 254:1326-1329.

1961–2002 Volunteer Health and Safety Trends

Figure 28

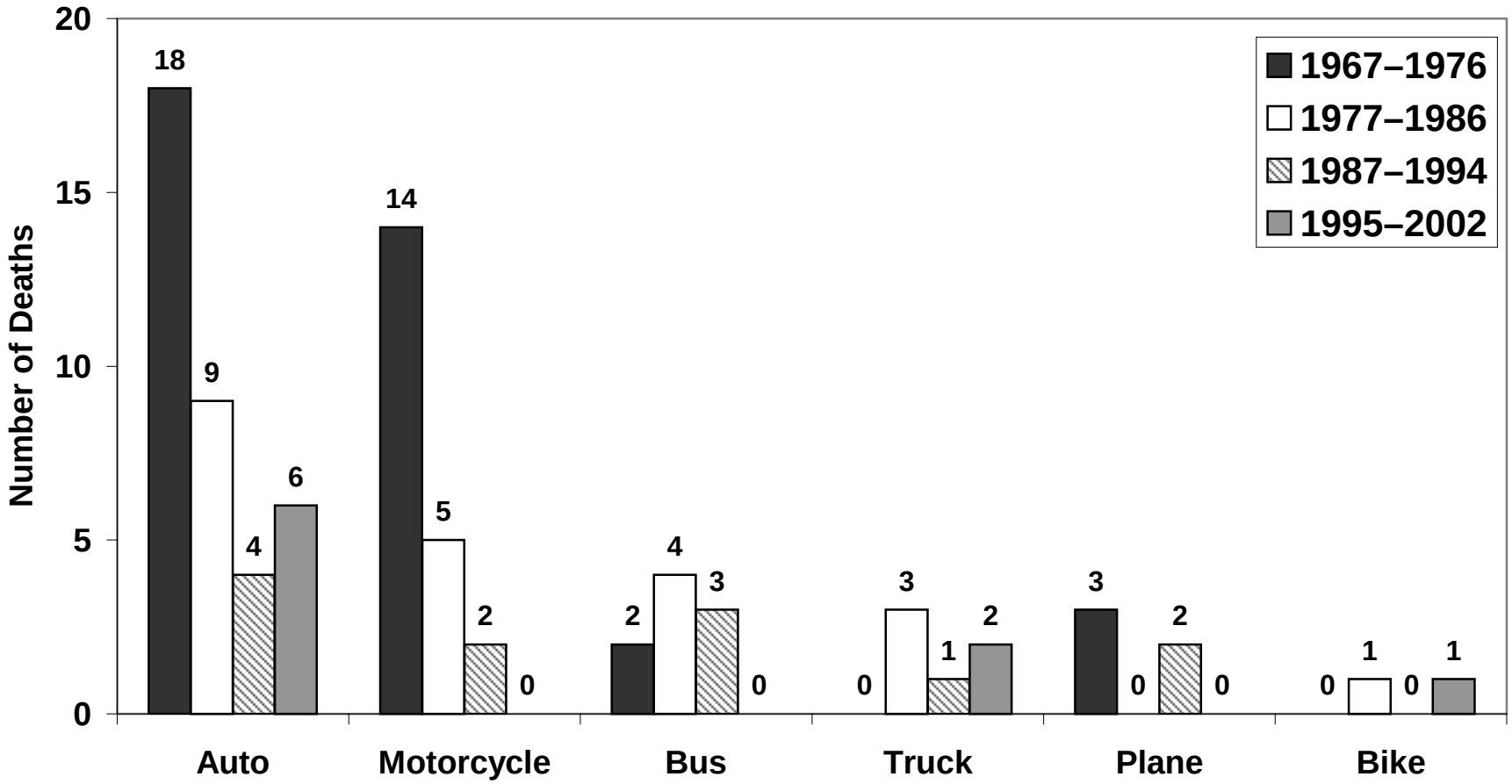
Cause-Specific Fatalities



1967–2002 Volunteer Health and Safety Trends

Figure 29

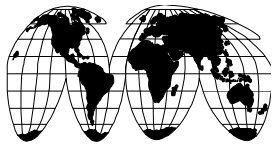
Number of Transportation-Related Deaths

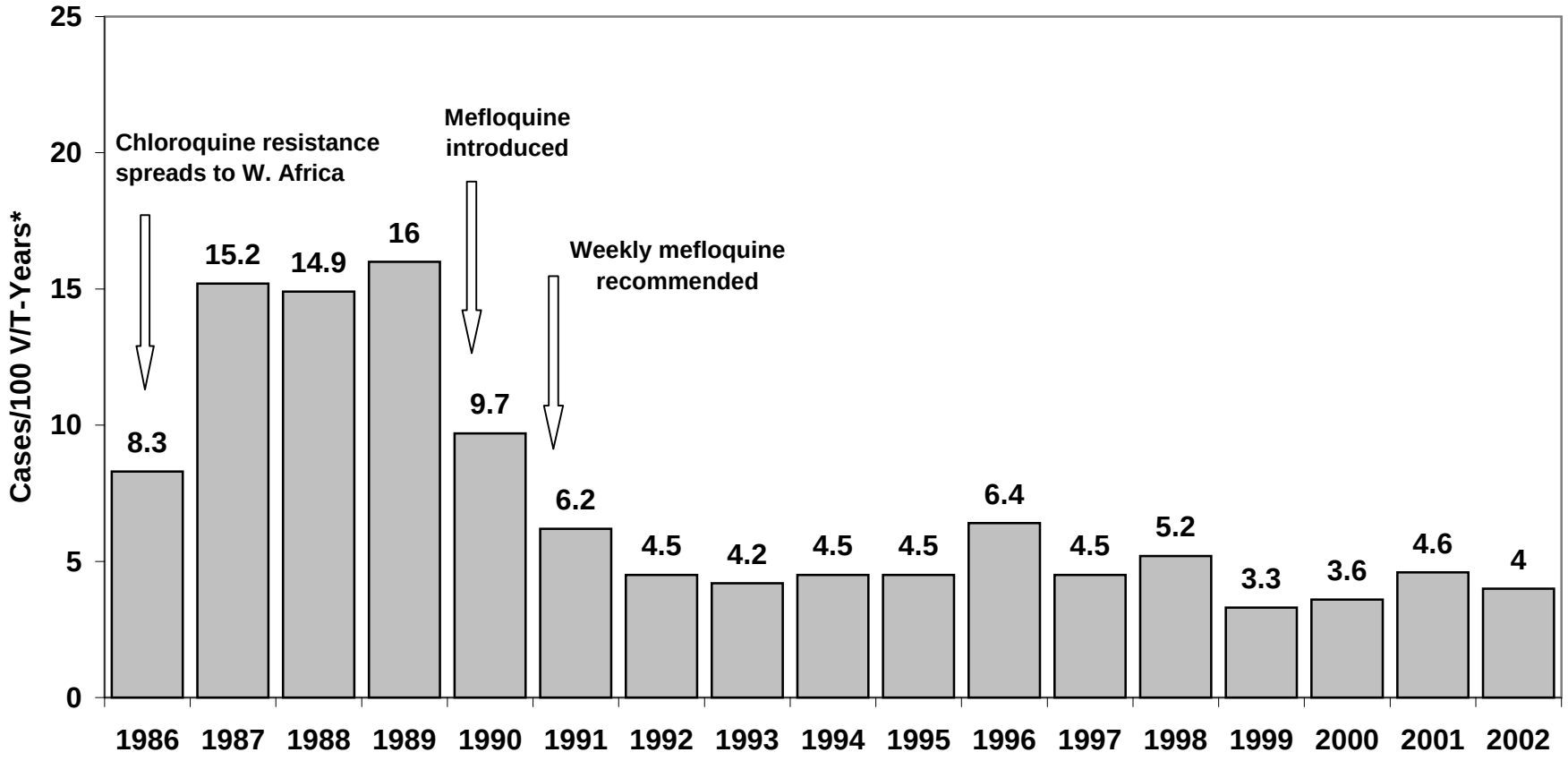


1986–2002 Africa Region Volunteer Health Trends

Incidence of Falciparum Malaria

Figure 30





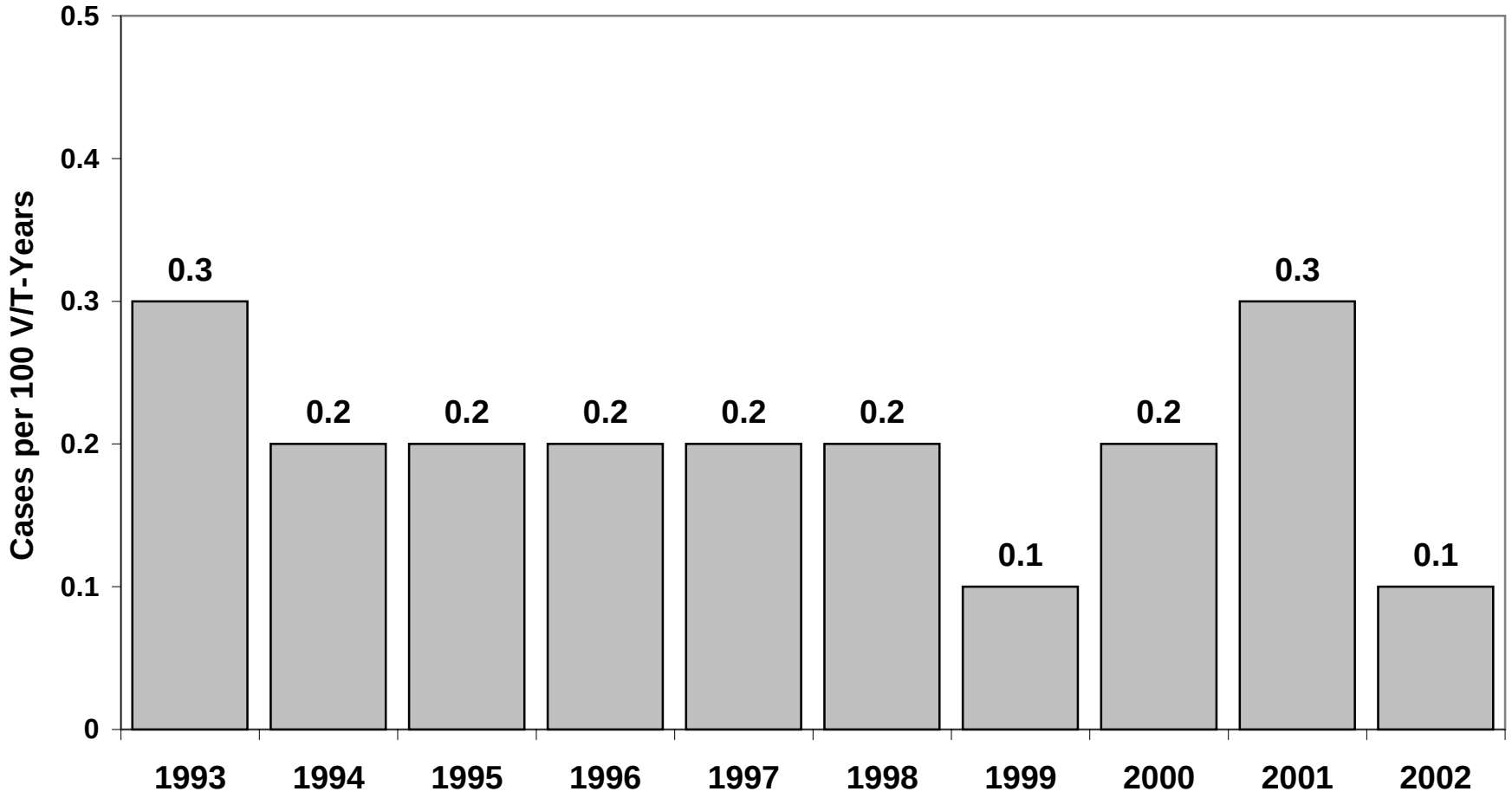
Note: Data represent laboratory-confirmed cases only

*Prior to 1993, rates per 100 Volunteer/Year were used as an approximation of V/T-Years

1993–2002 Volunteer Health Trends

Figure 31

Incidence of Non-Falciparum Malaria

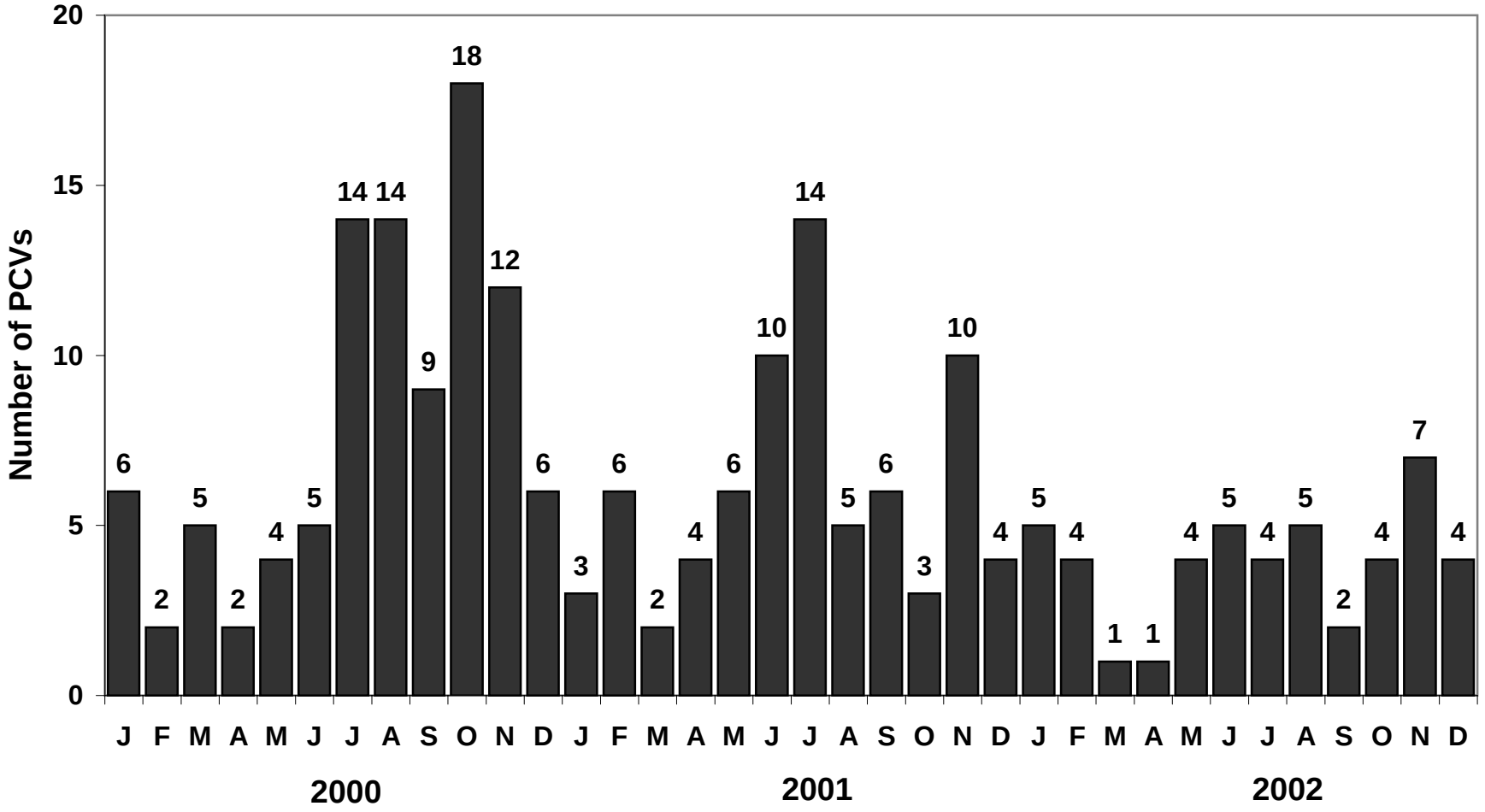


Note: Data represent laboratory-confirmed cases

2000–2002 Volunteer Health Trends

Figure 32

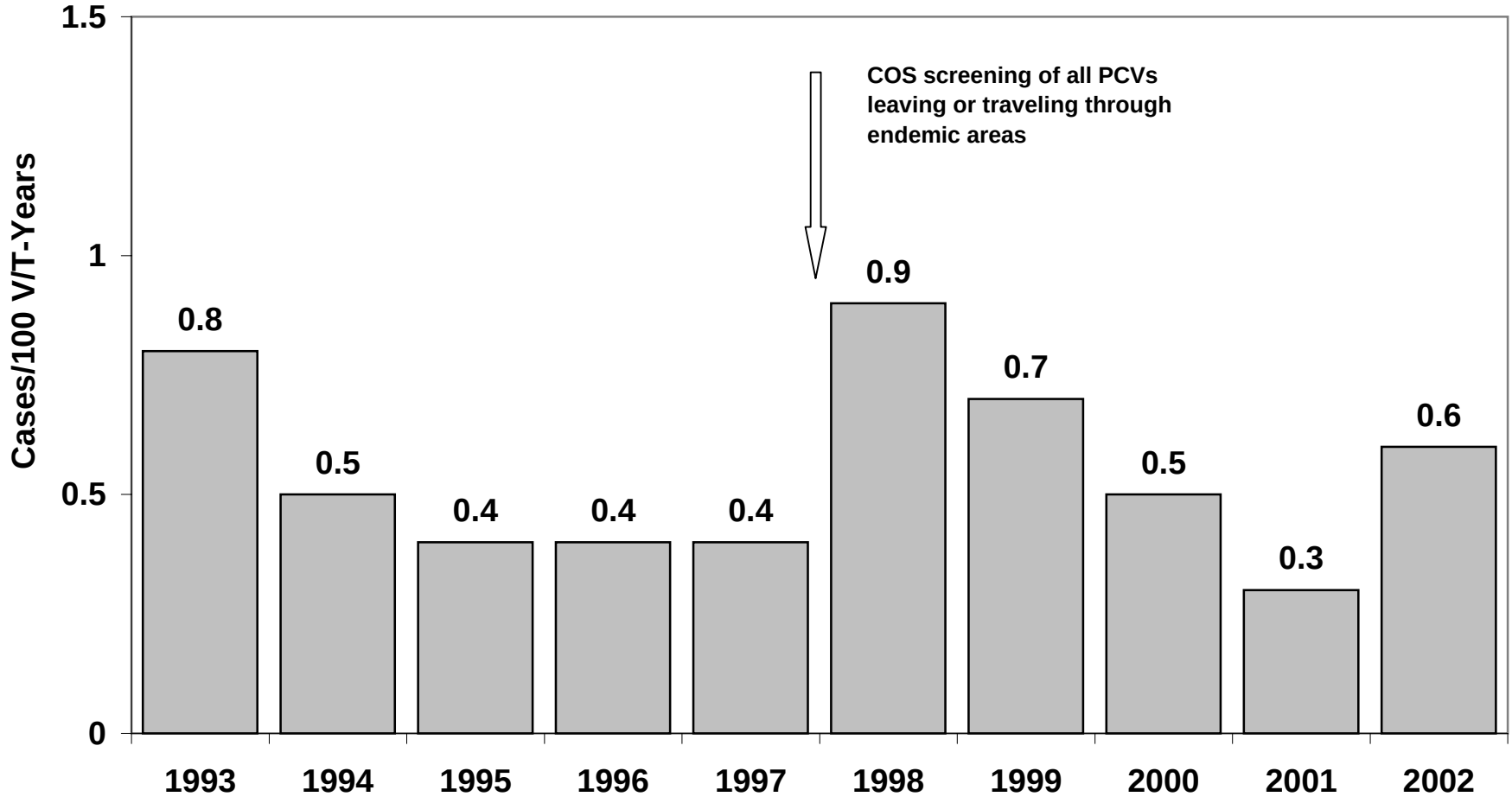
Dengue Infections by Month



1993–2002 Volunteer Health Trends

Figure 33

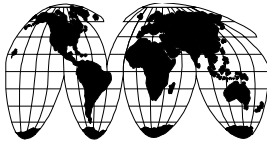
Incidence of Schistosomiasis

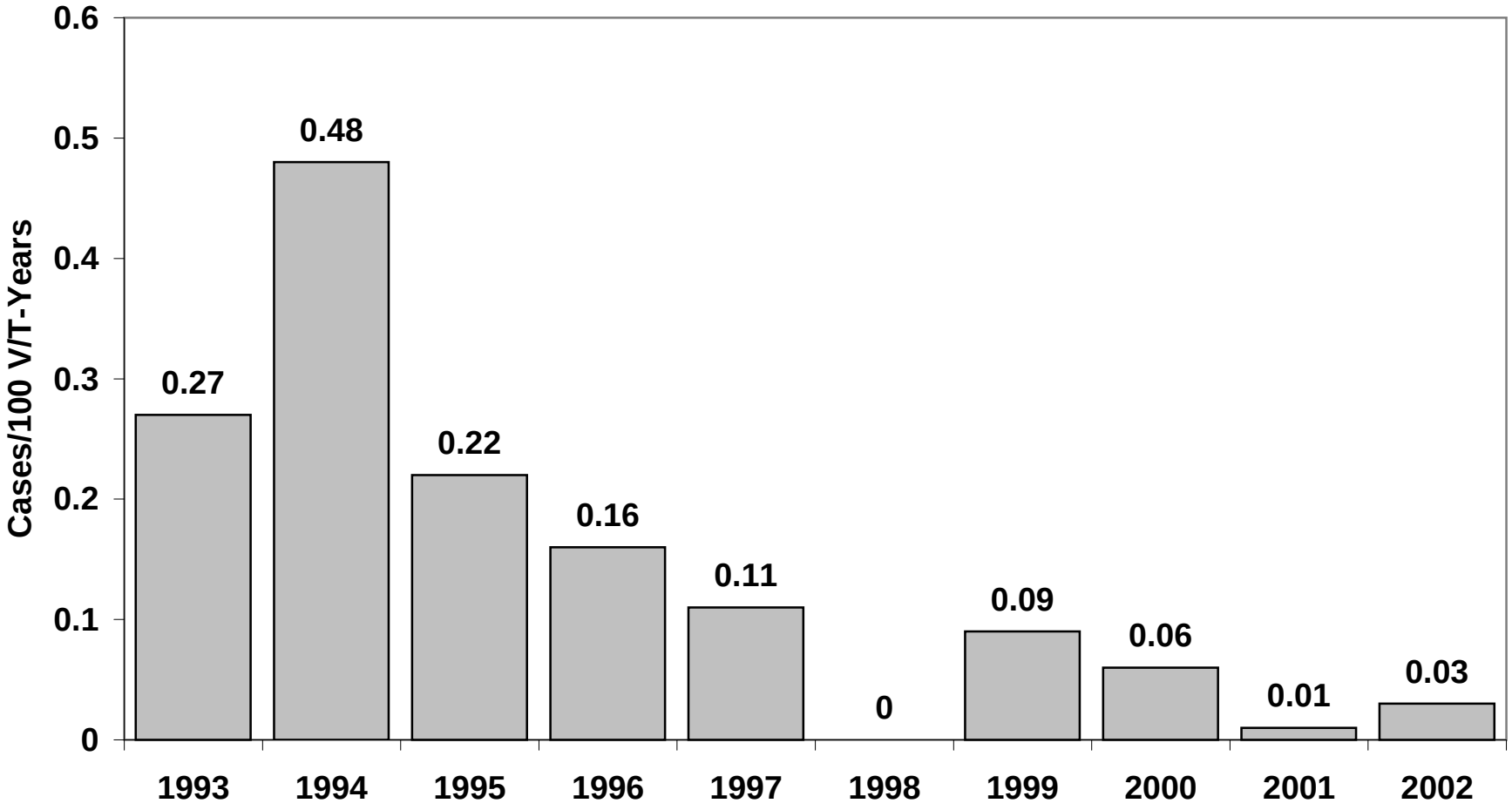


1993–2002 Volunteer Health Trends

Incidence of Filariasis

Figure 34

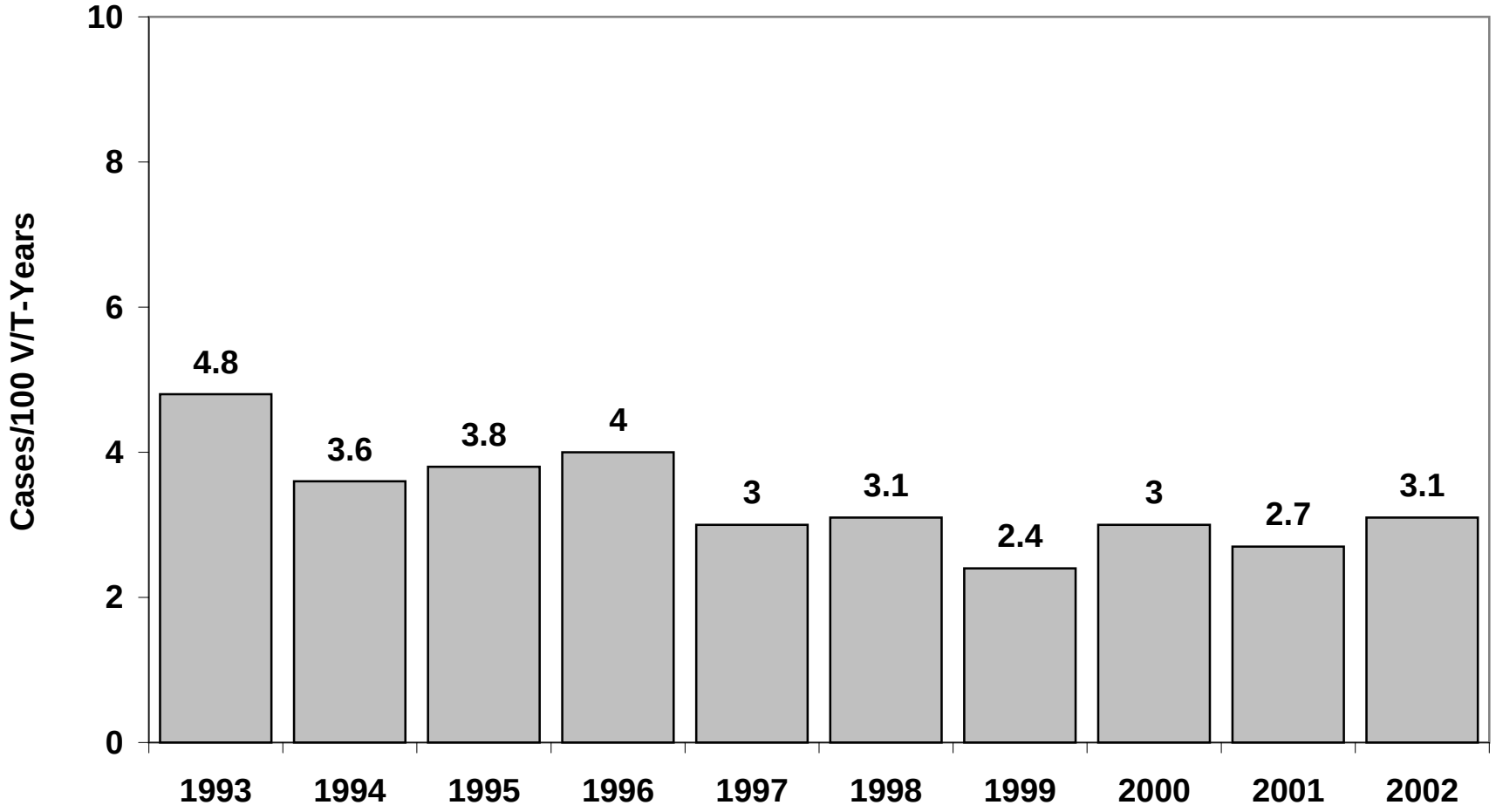




1993–2002 Volunteer Health Trends

Figure 35

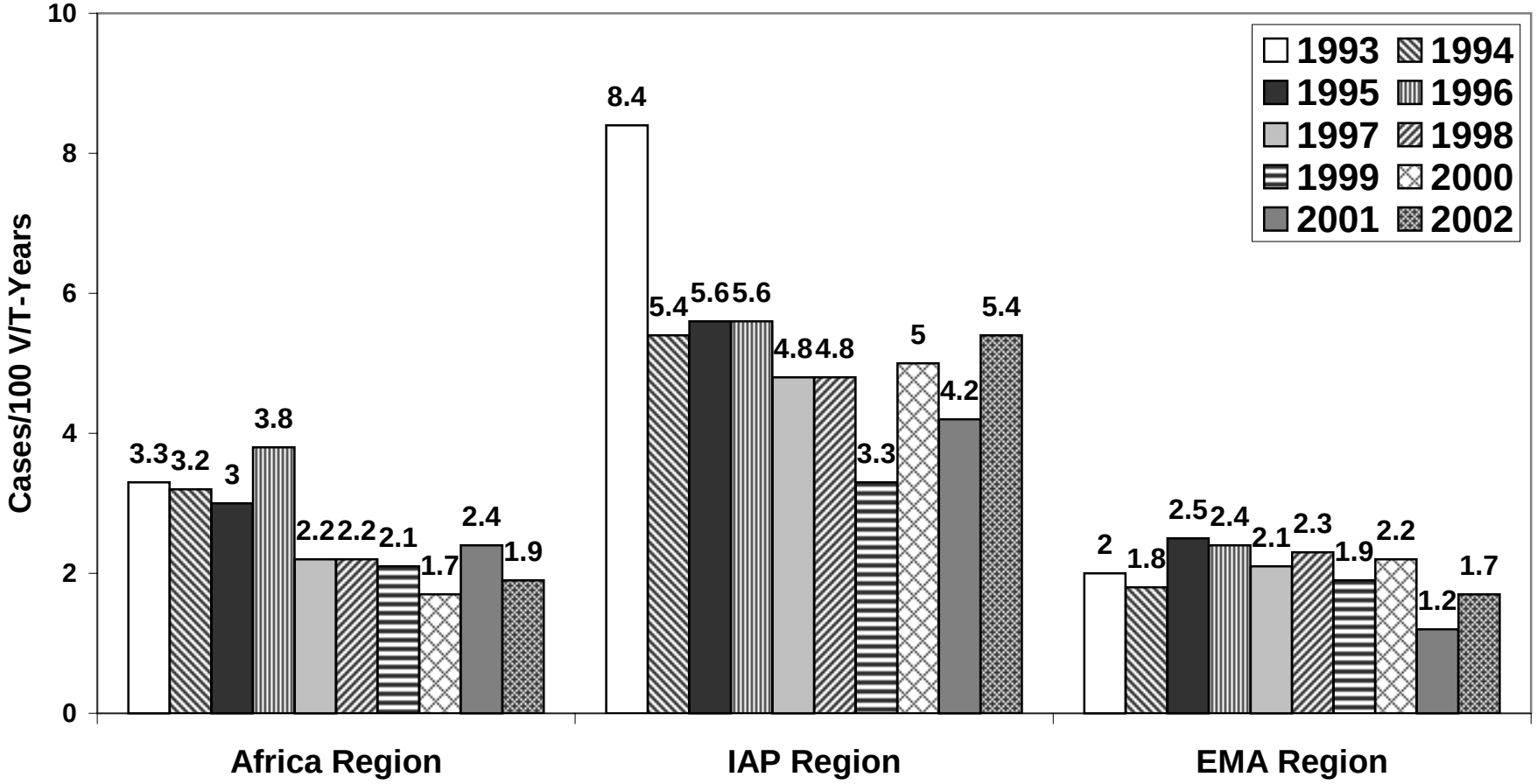
Incidence of Intestinal Helminths



1993–2002 Volunteer Health Regional Trends

Figure 36

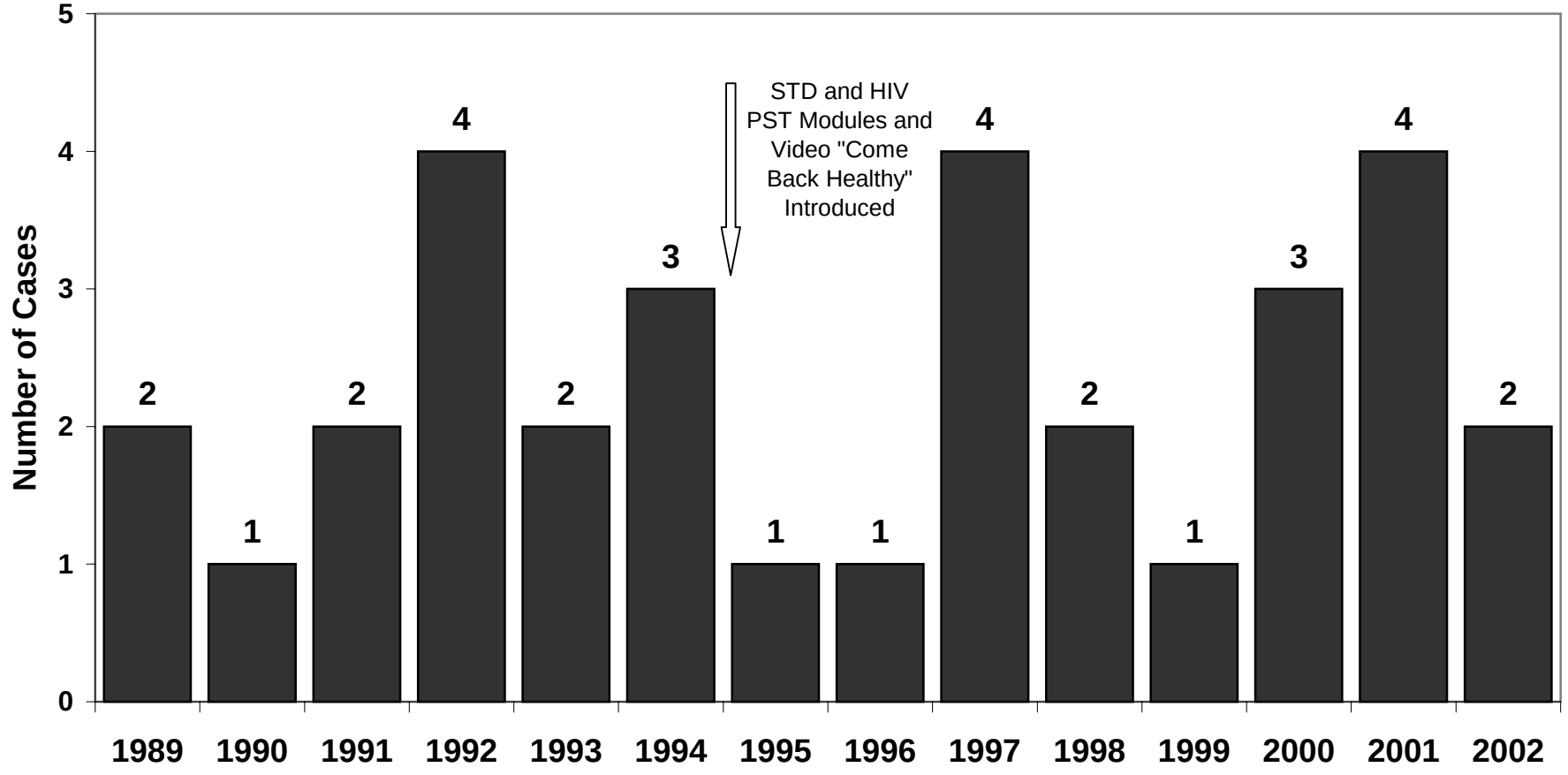
Incidence of Intestinal Helminths



1989–2002 Volunteer Health Trends

Figure 37

HIV Infections by Year Reported

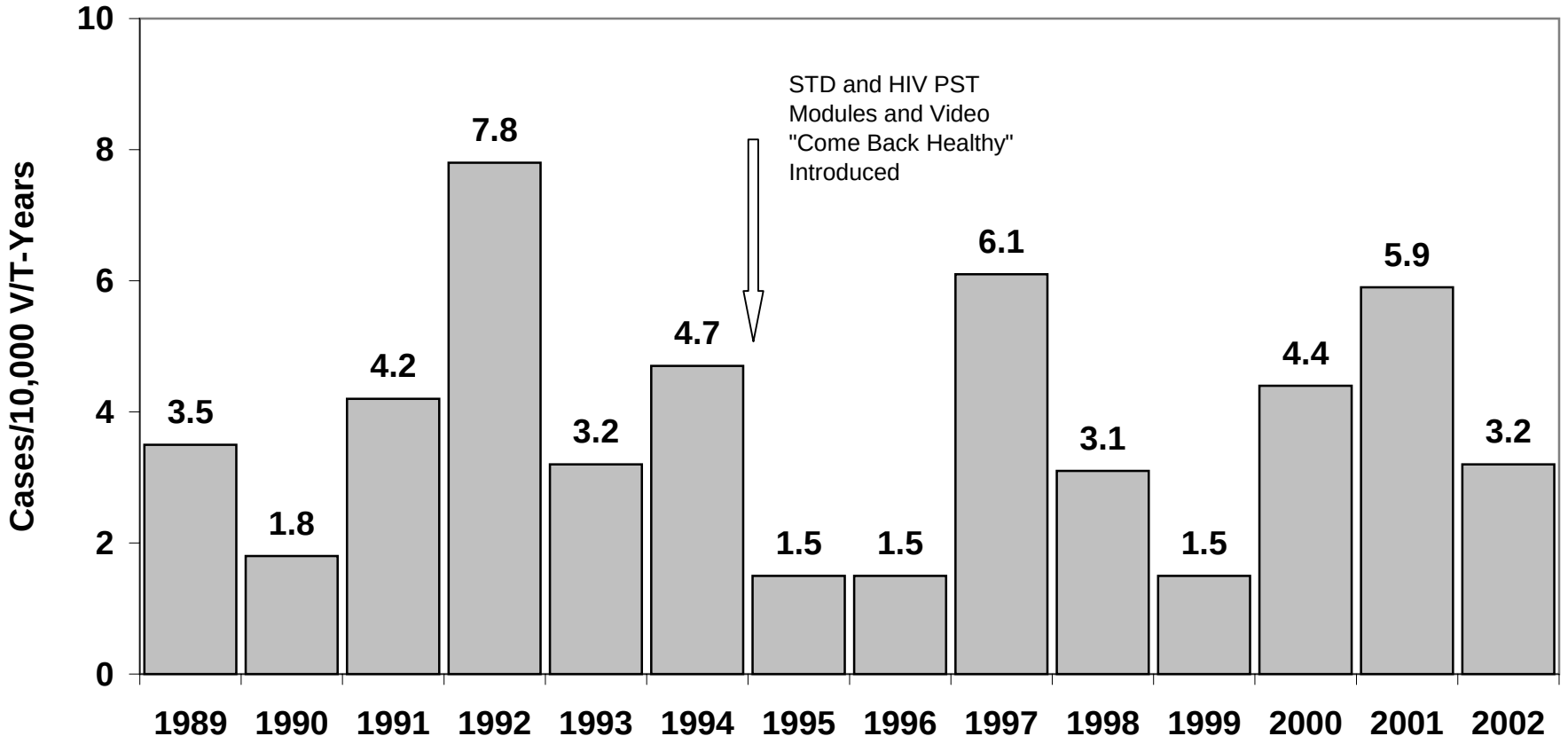


Note: All infections have been with HIV-1

1989–2002 Volunteer Health Trends

Figure 38

Incidence of HIV Infections



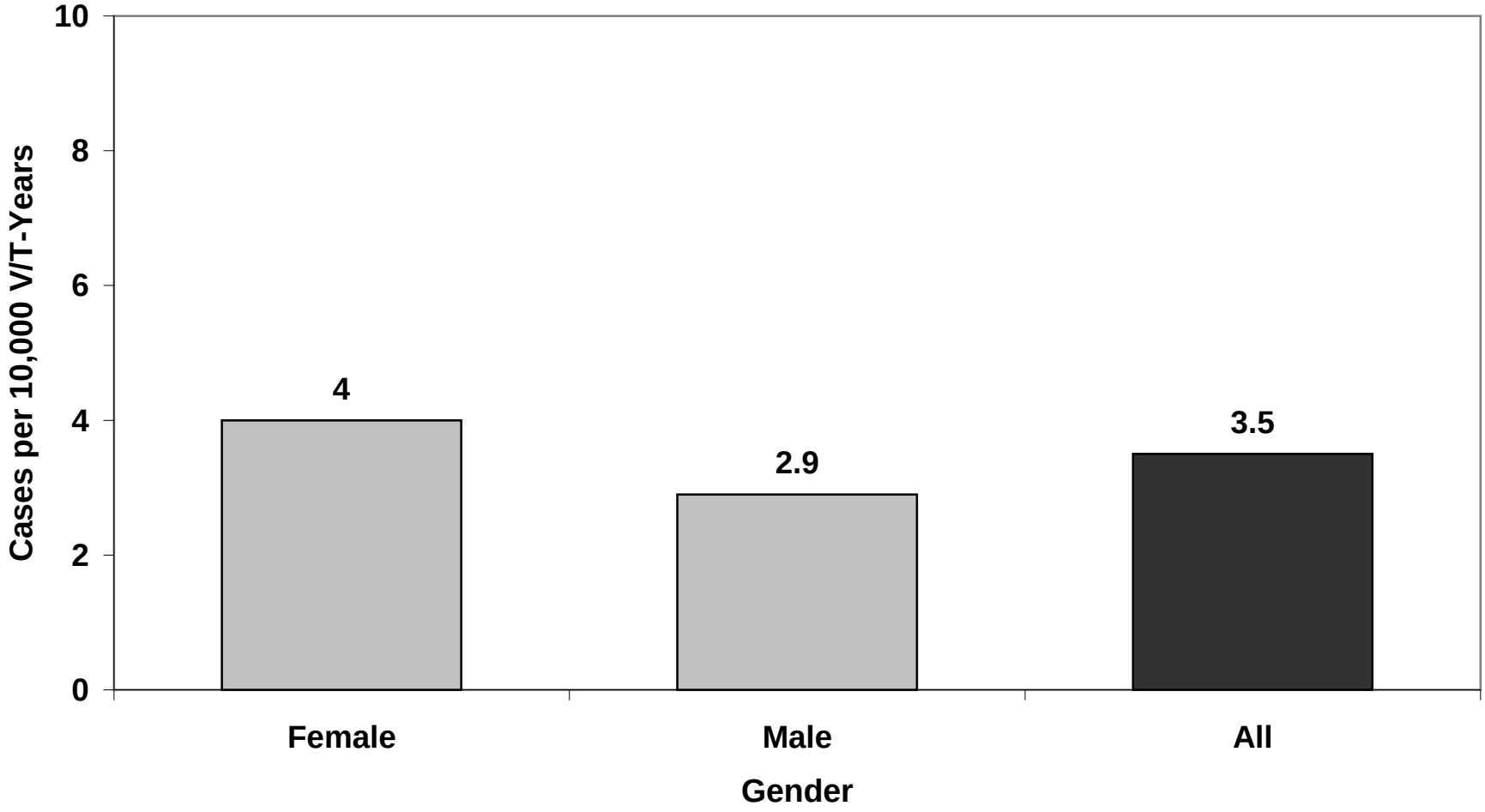
Note: All infections have been with HIV-1

*Prior to 1993, rates per 10,000 Volunteer/Year were used as an approximation of V/T-Years

1993–2002 Volunteer Health Trends

Figure 39

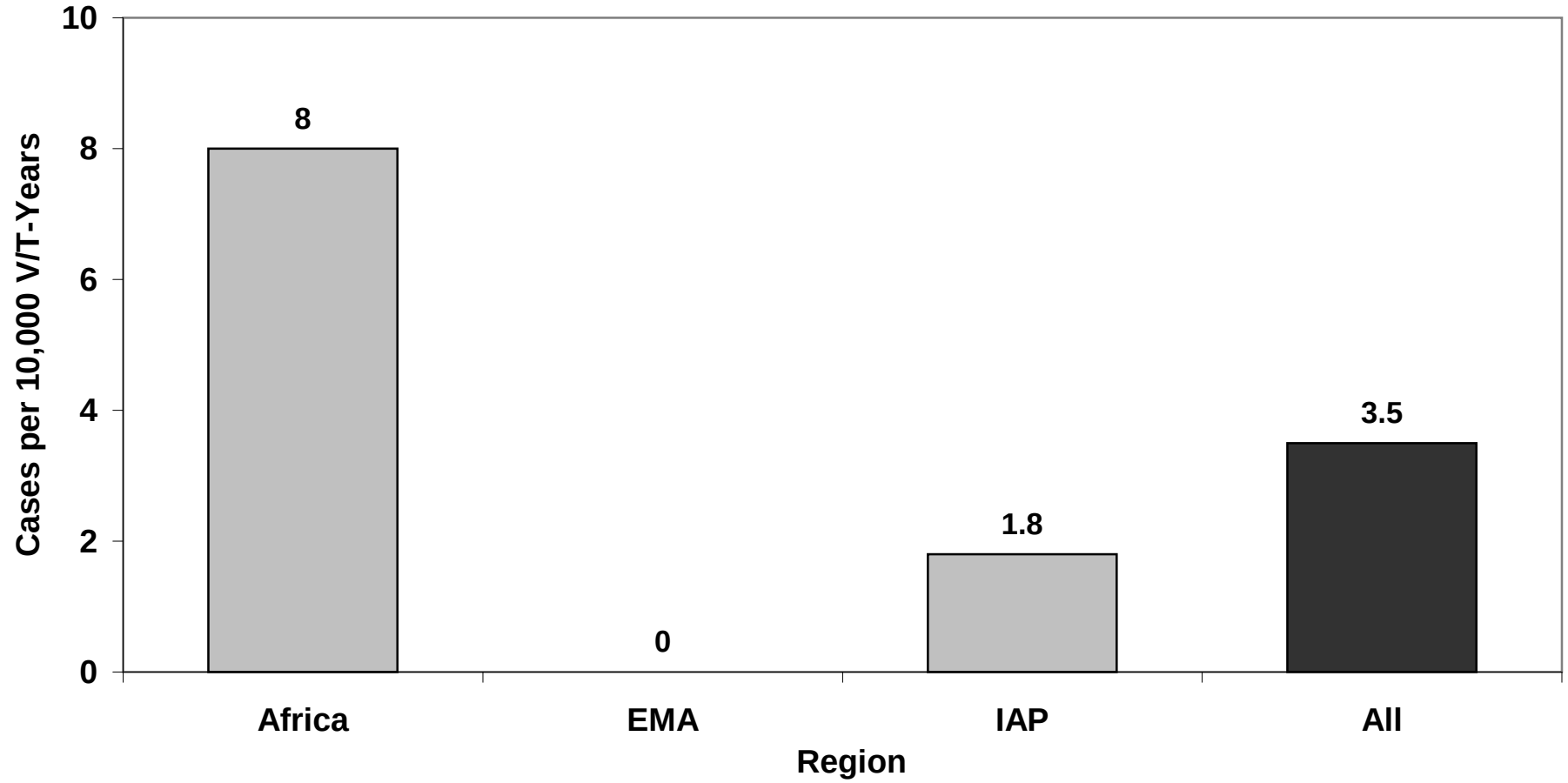
Incidence of HIV Infections by Gender



1993–2002 Volunteer Health Trends

Figure 40

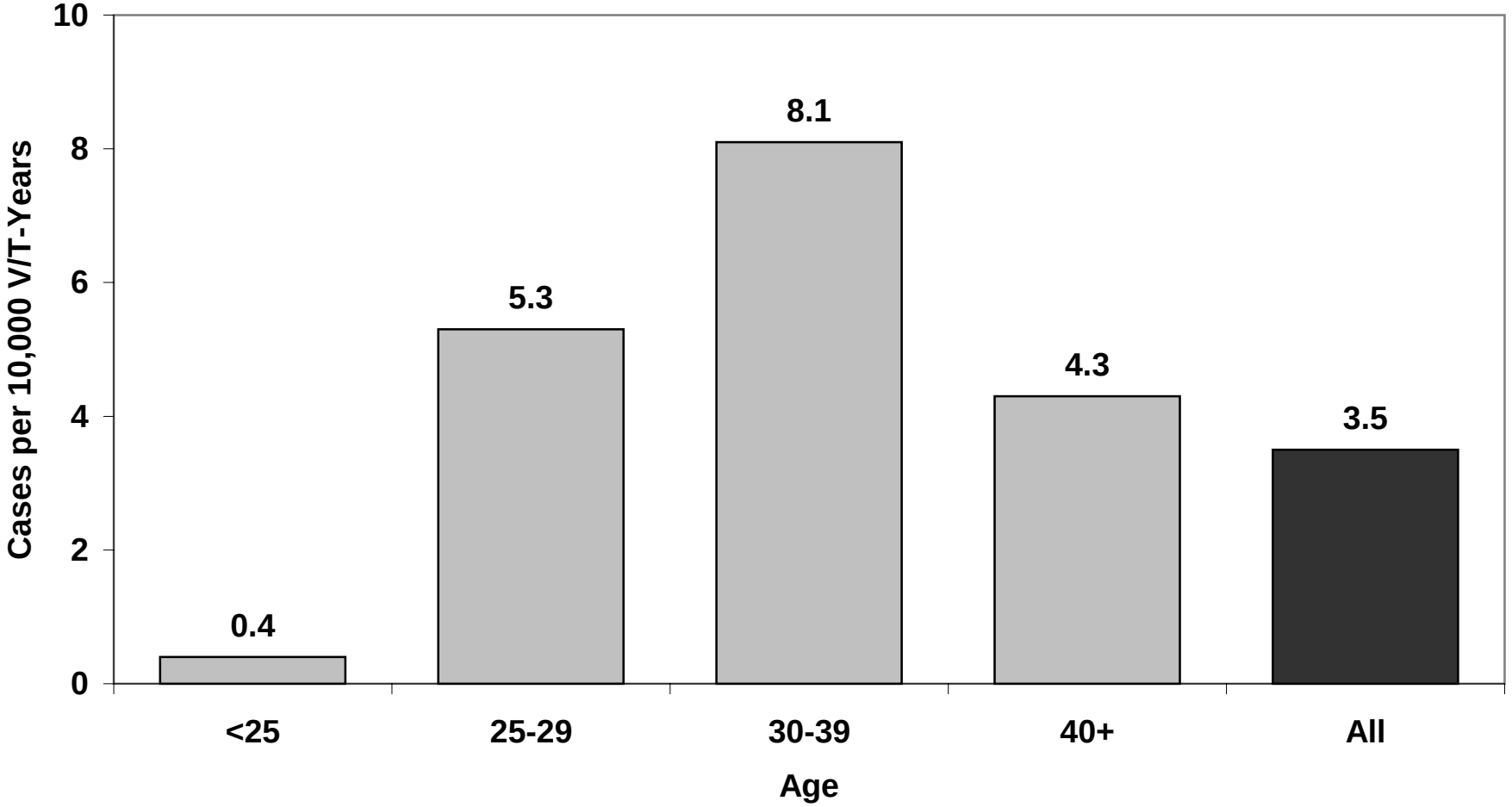
Incidence of HIV Infections by Region



1993–2002 Volunteer Health Trends

Figure 41

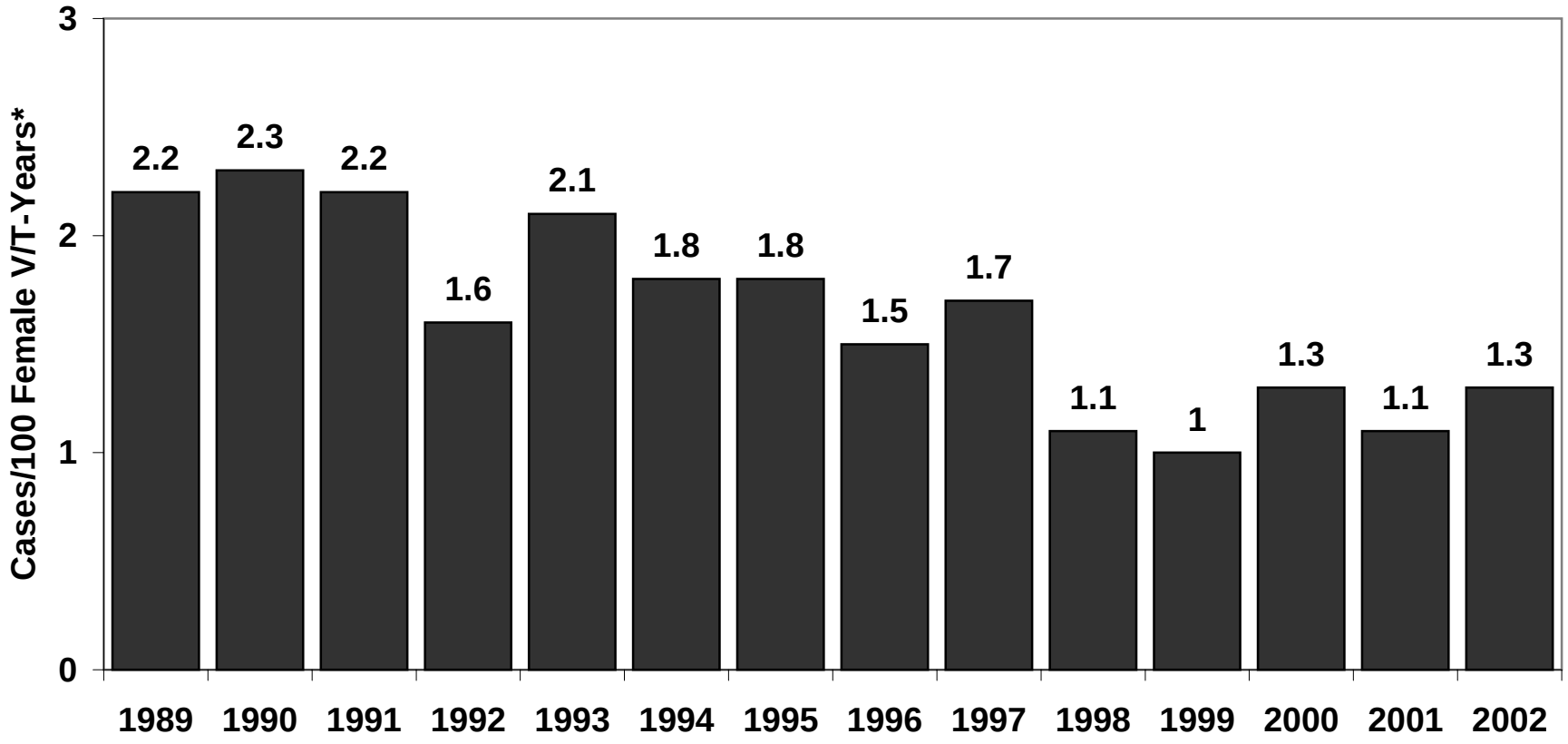
Incidence of HIV Infections by Age



1989–2002 Volunteer Health Trends

Figure 42

Incidence of Pregnancy

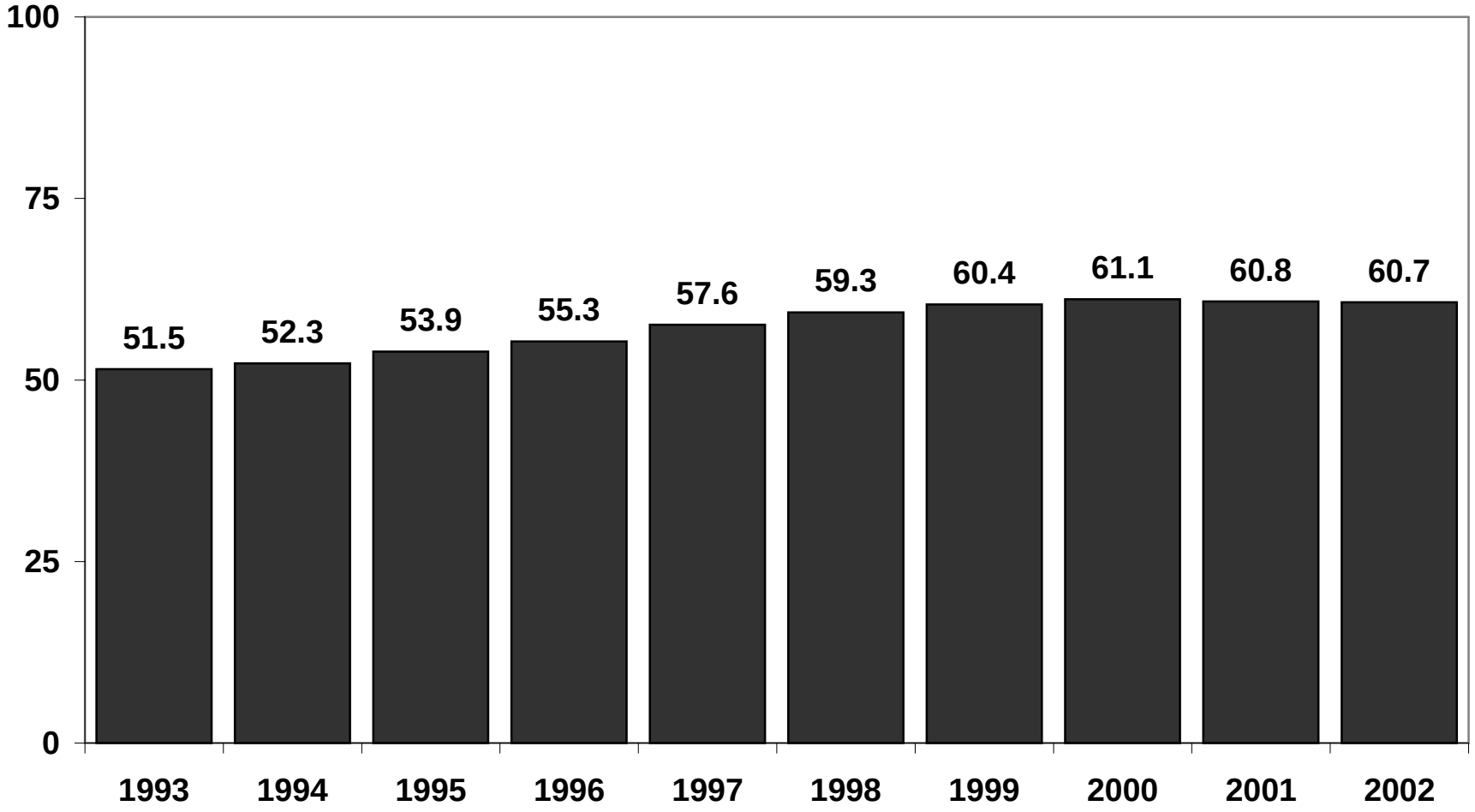


*Prior to 1993, rates per 100 female Volunteer/Year were used as an approximation of female V/T-Years.

1993–2002 Volunteer Health Trends

Figure 43

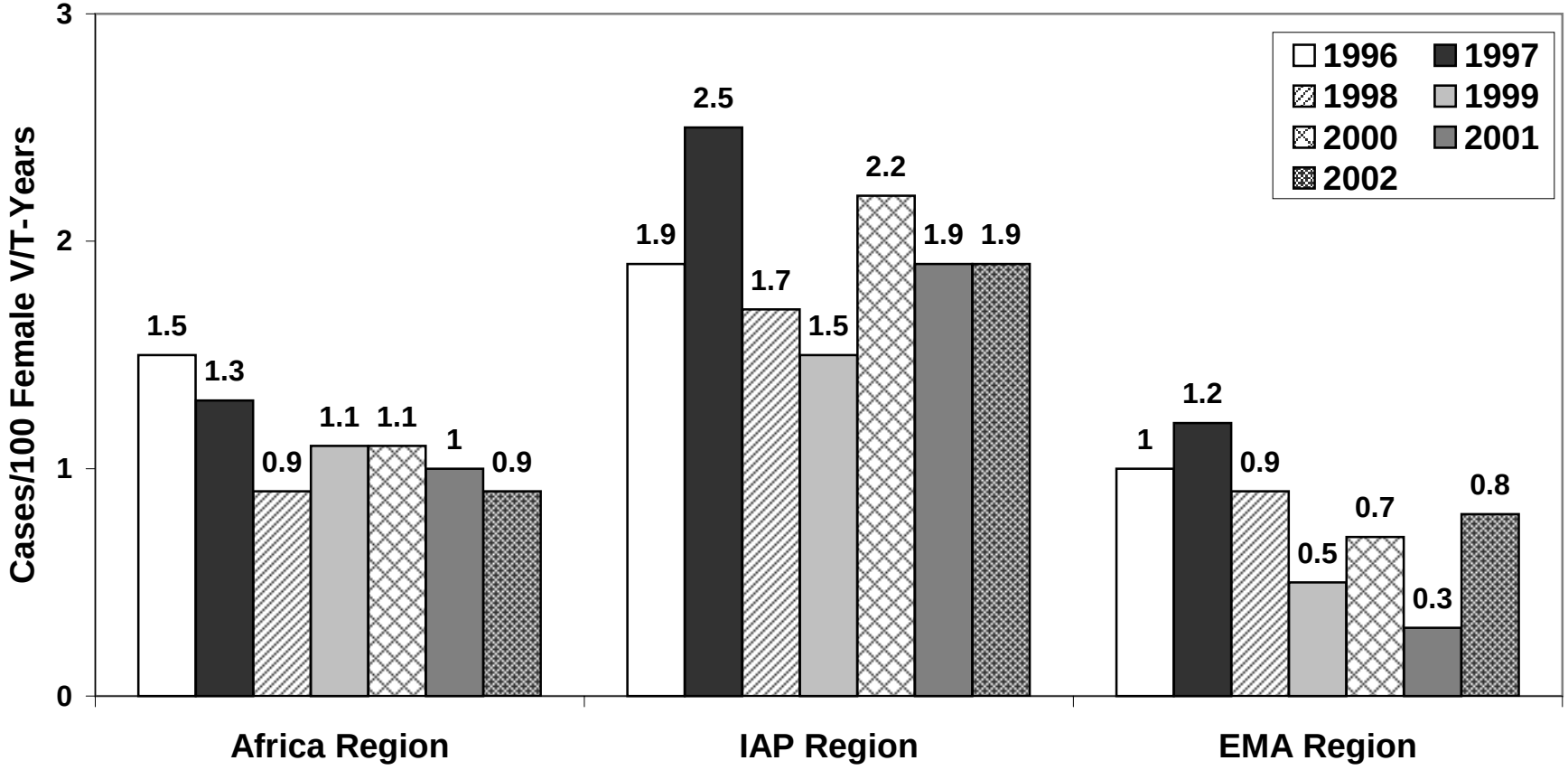
Percentage of Female V/T-Years



1996–2002 Volunteer Health Regional Trends

Figure 44

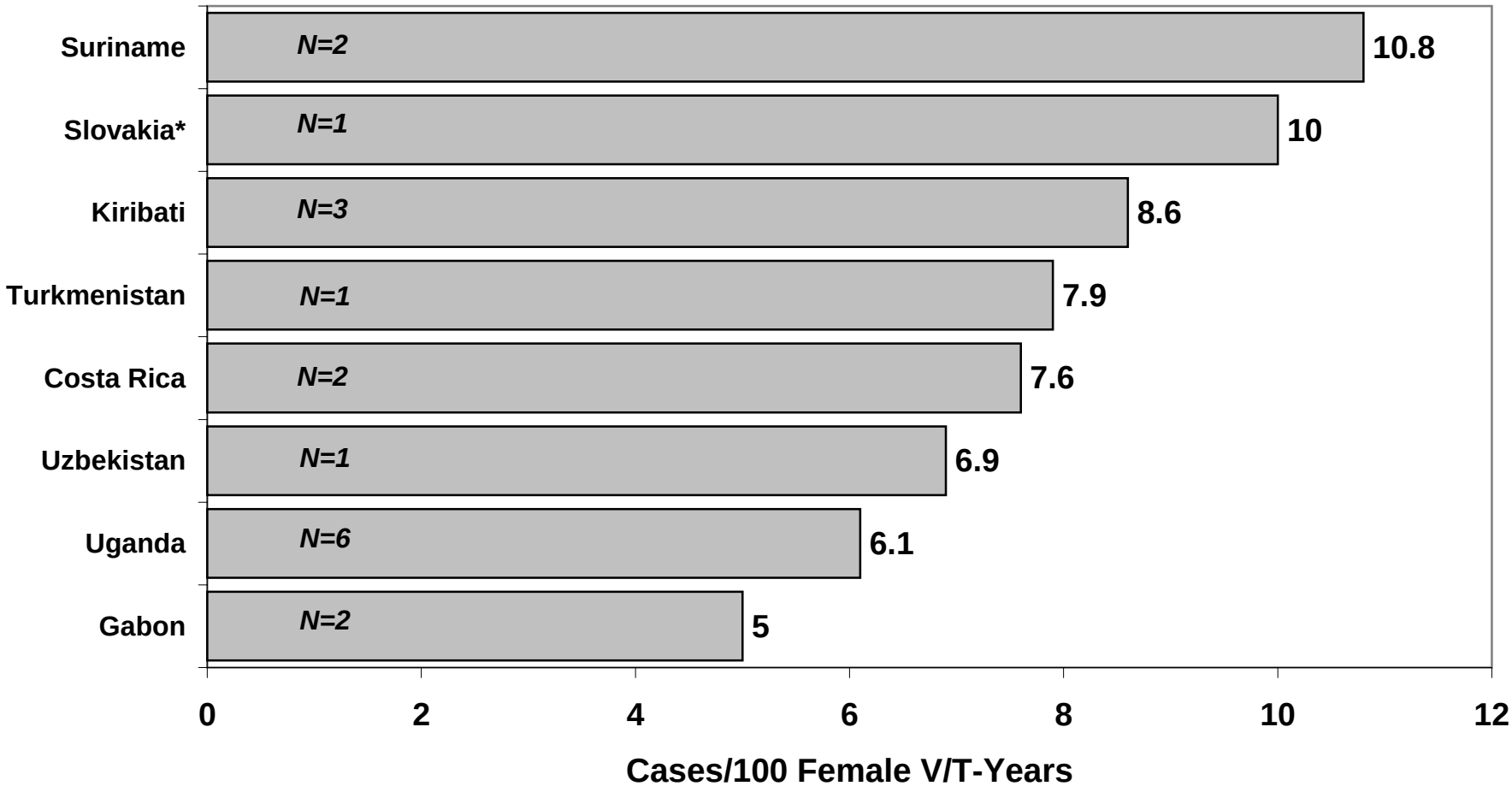
Incidence of Pregnancy



2002 Volunteer Health Country Profiles

Figure 45

Highest Incidence of Pregnancy

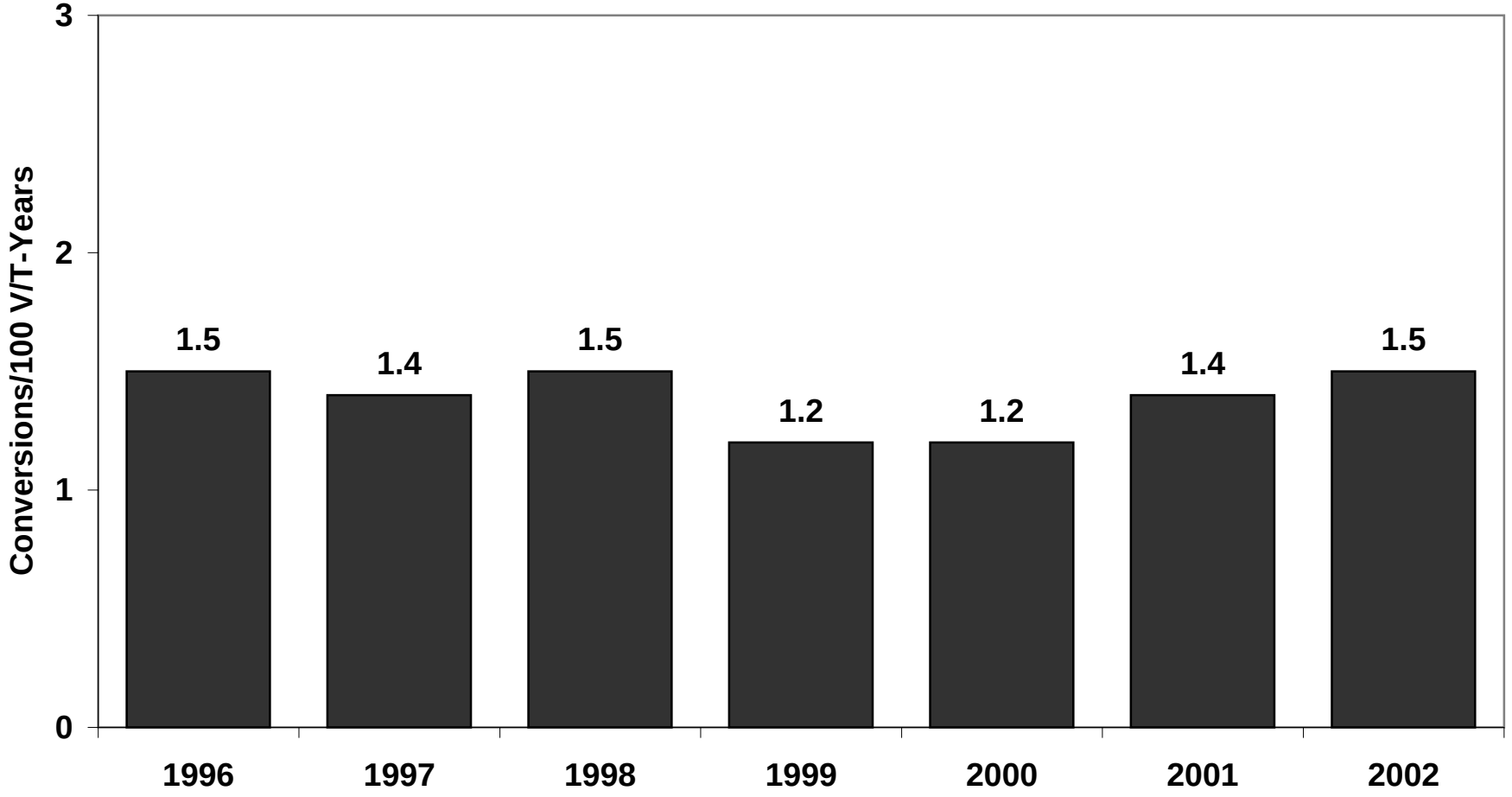


*Country closed in 2002

1996–2002 Volunteer Health Trends

Figure 46

Incidence of Tuberculin Skin Test Conversions



1996–2002 Volunteer Health Regional Trends

Figure 47

Incidence of Tuberculin Skin Test Conversions

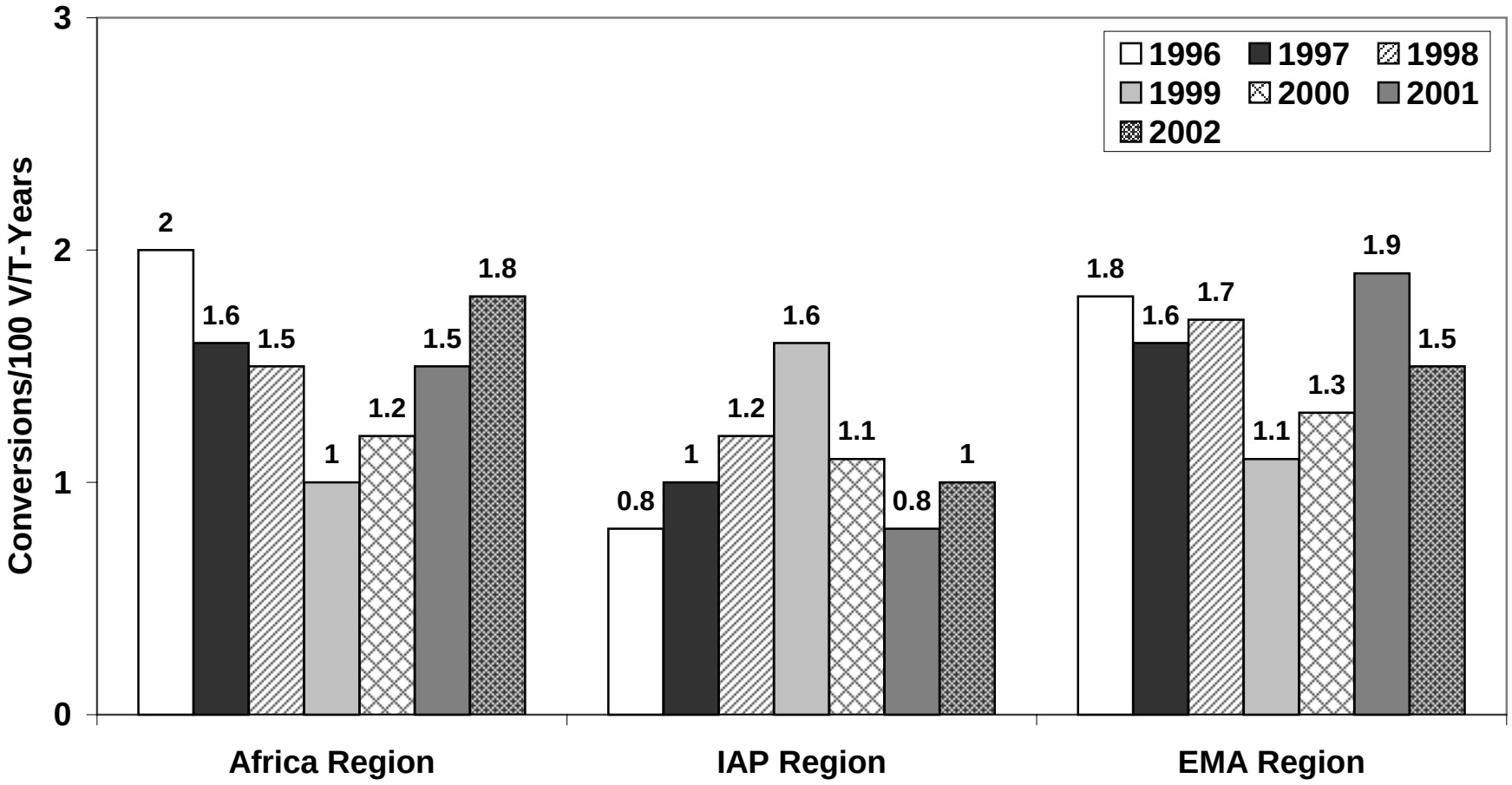
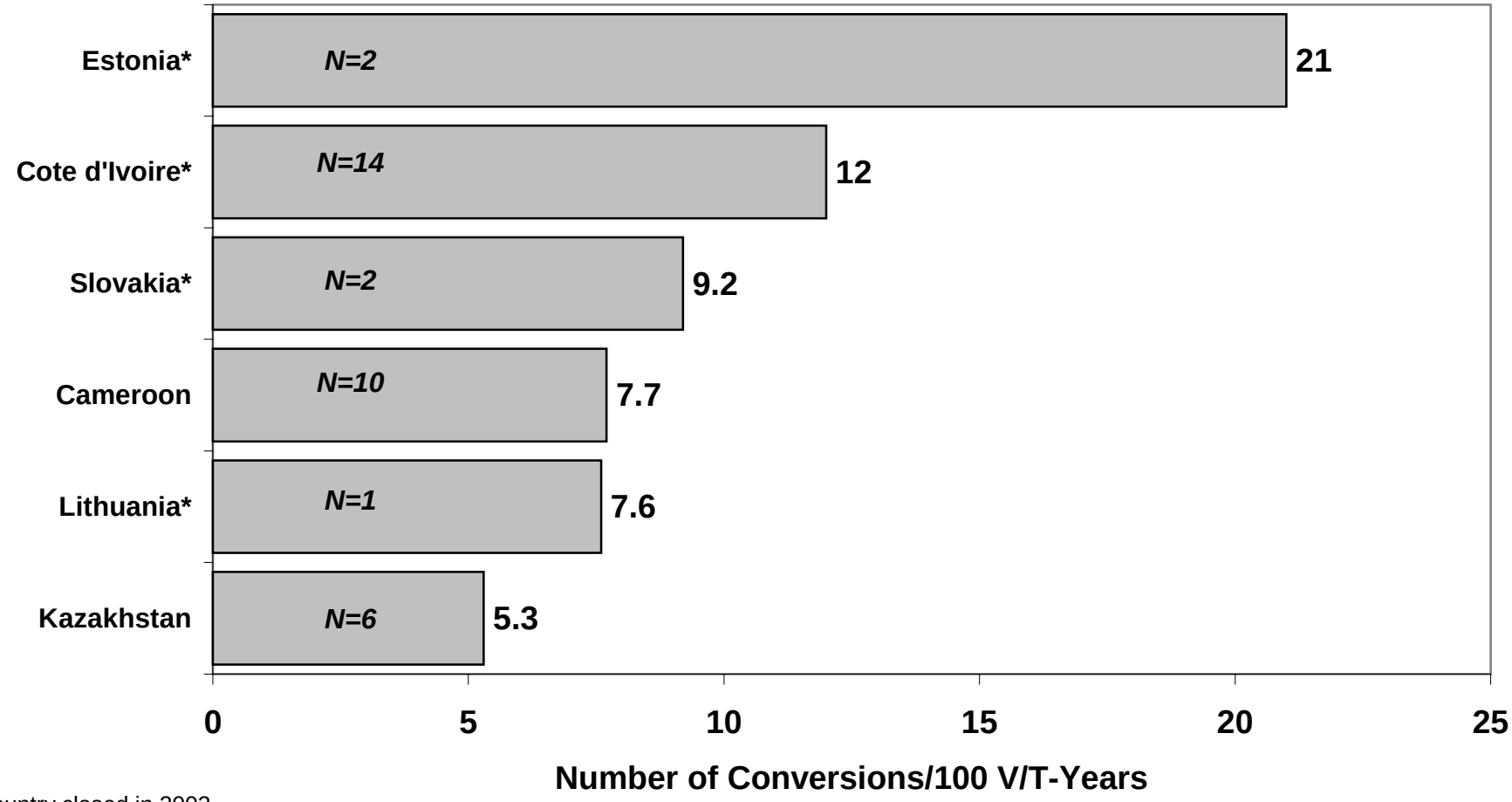


Figure 48

Highest Incidence of Tuberculin Skin Test Conversions

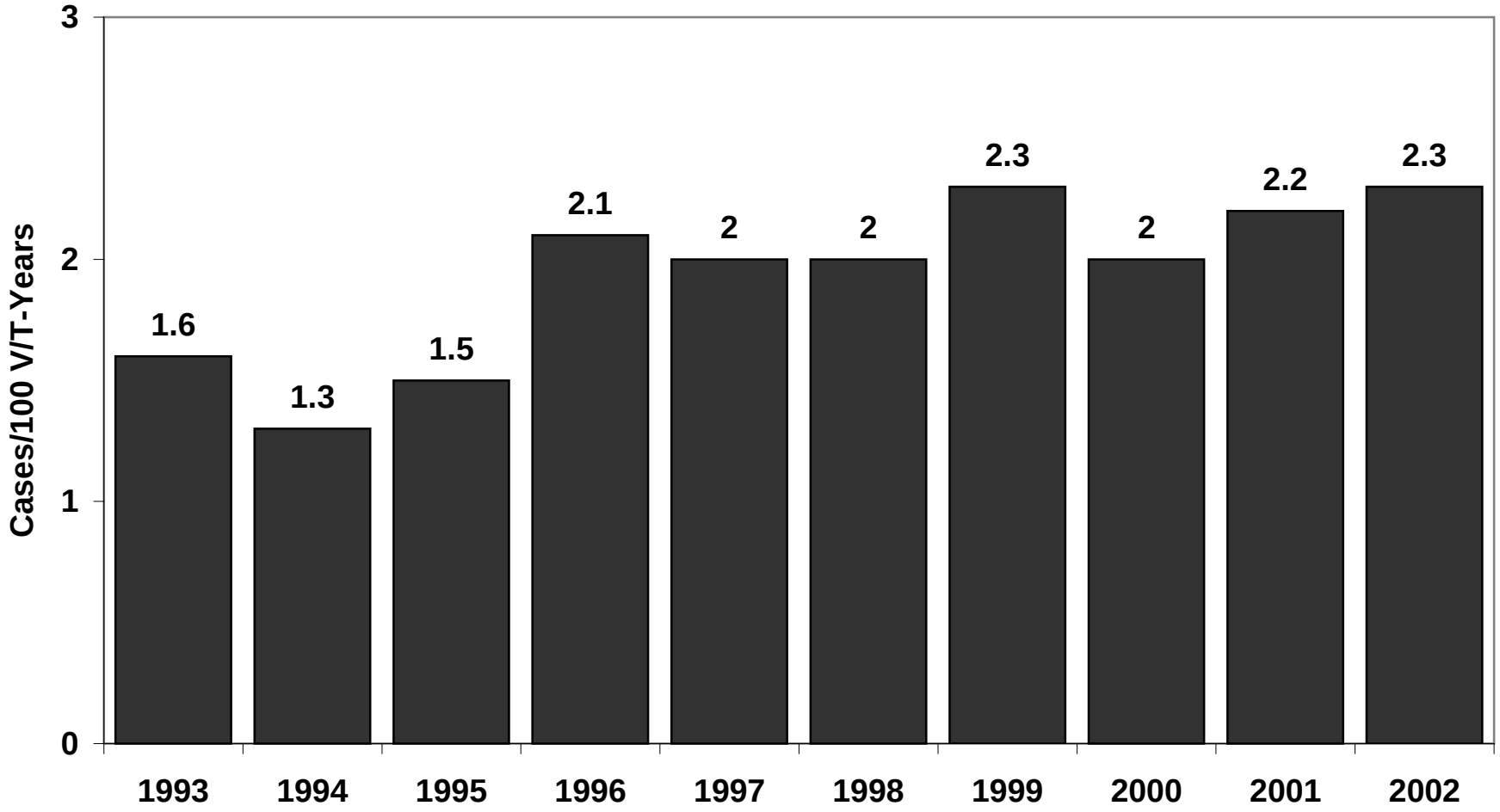


*Country closed in 2002

1993–2002 Volunteer Health Trends

Figure 49

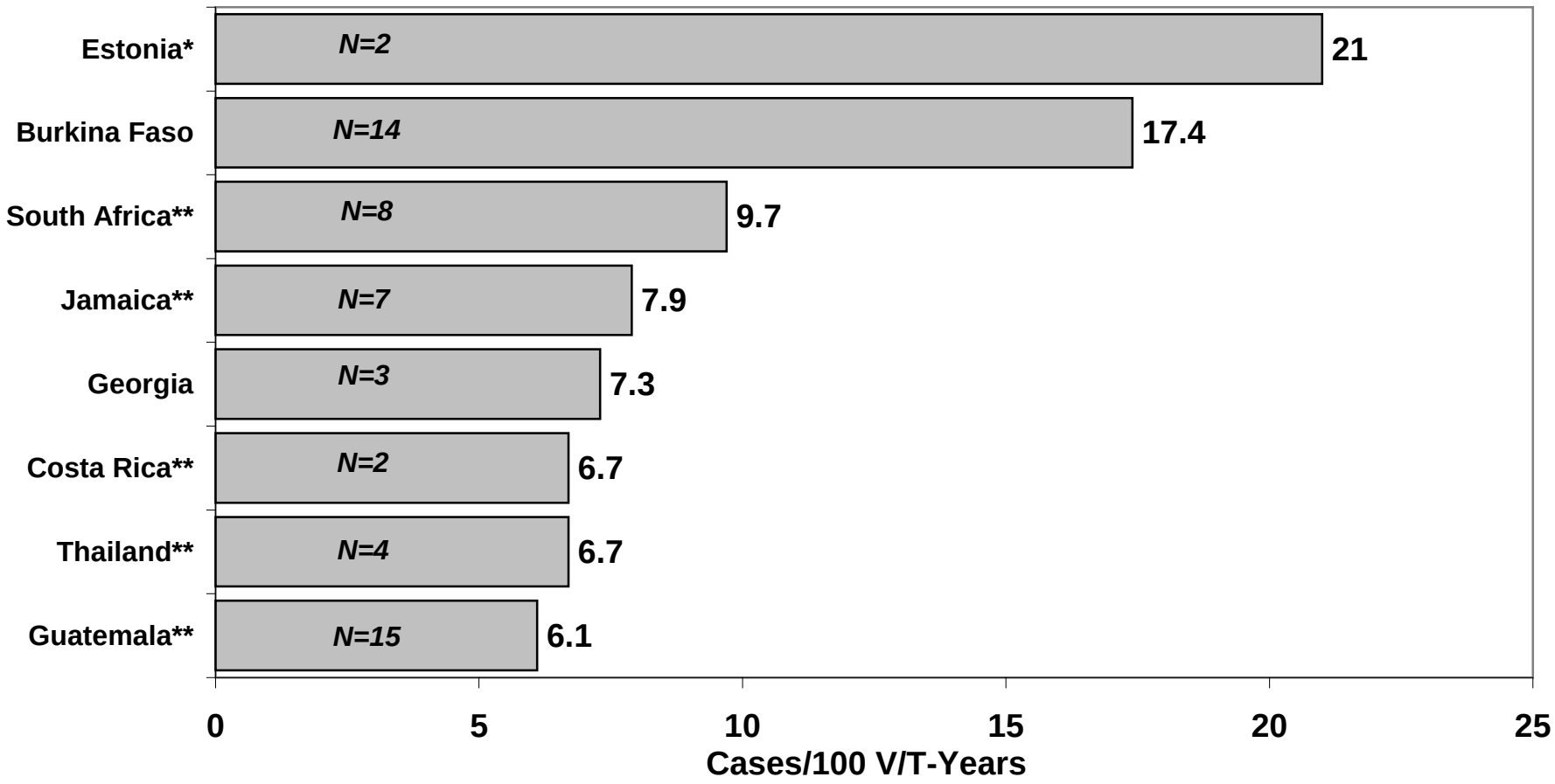
Incidence of Asthma



2002 Volunteer Health Country Profiles

Figure 50

Highest Incidence of Asthma



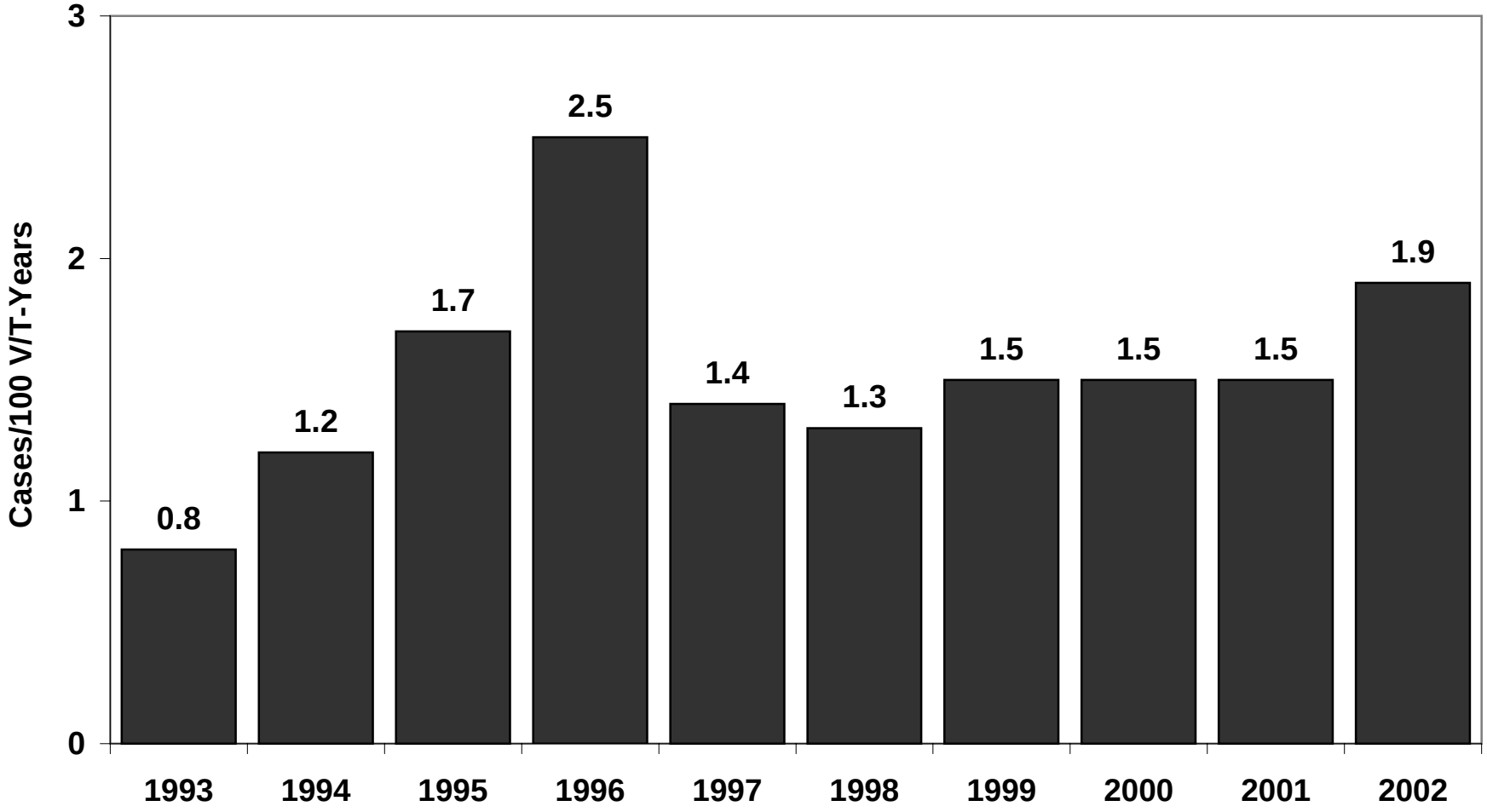
*Country closed in 2002

**This country accepts trainees/Volunteers with known stable asthma documented on pre-service exam

1993–2002 Volunteer Health Trends

Figure 51

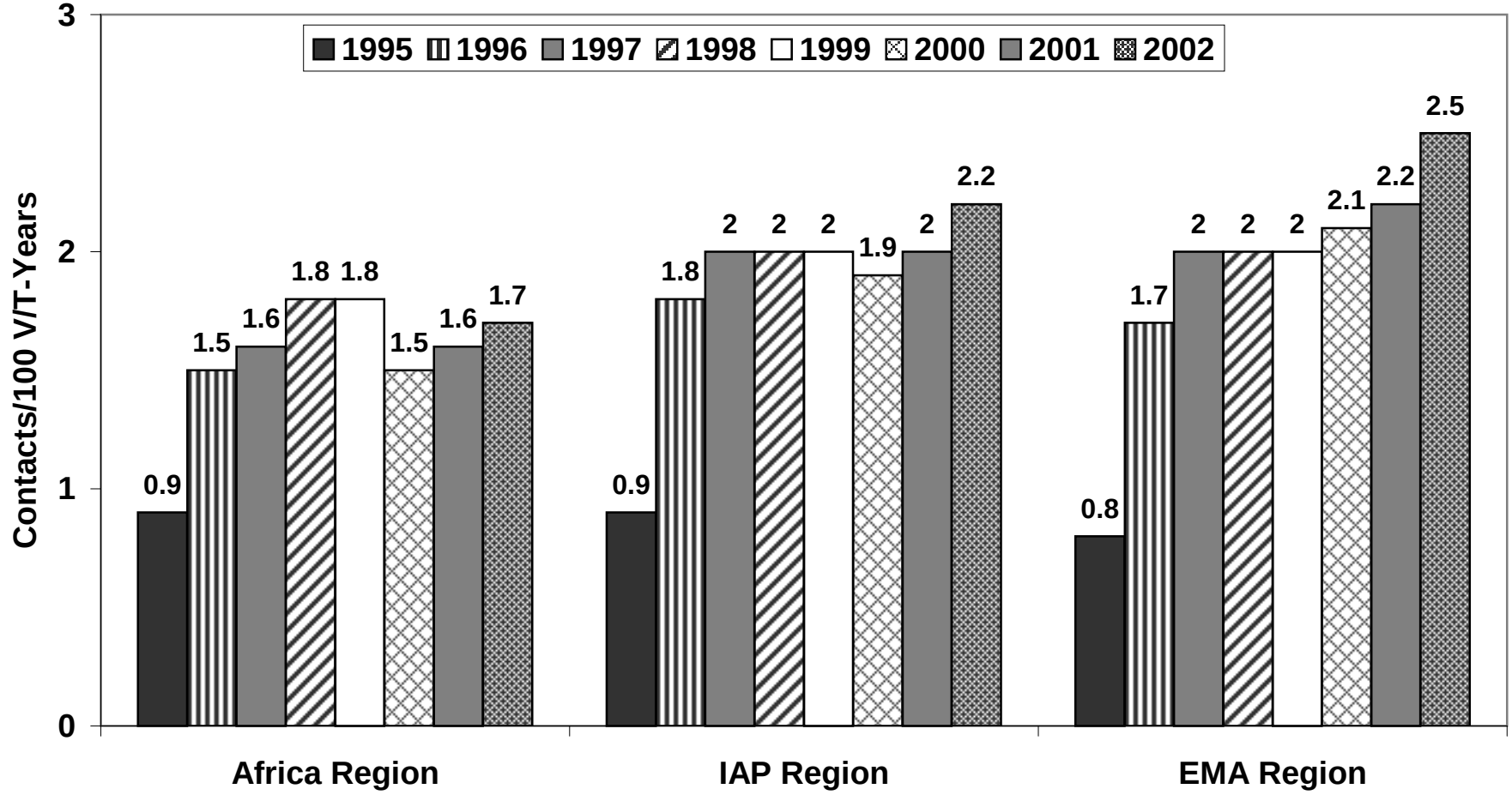
Incidence of Alcohol Problems



1995–2002 Volunteer Health and Safety Regional Trends

Figure 52

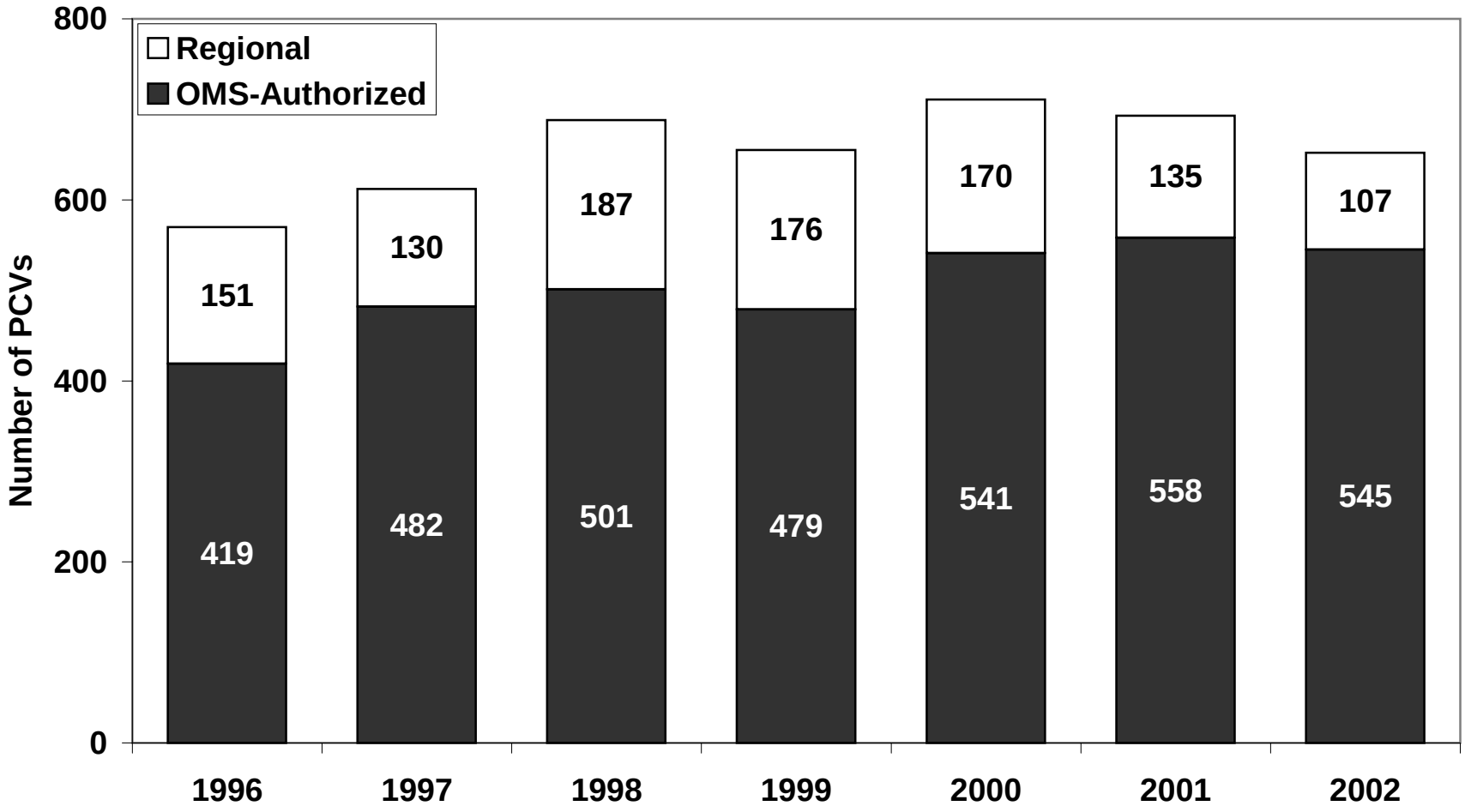
Incidence of Monthly PCMO-Volunteer Contacts



1996–2002 Volunteer Health Trends

Figure 53

Medical Evacuations



1996–2002 Volunteer Health Trends

Figure 54

Incidence of Medical Evacuations

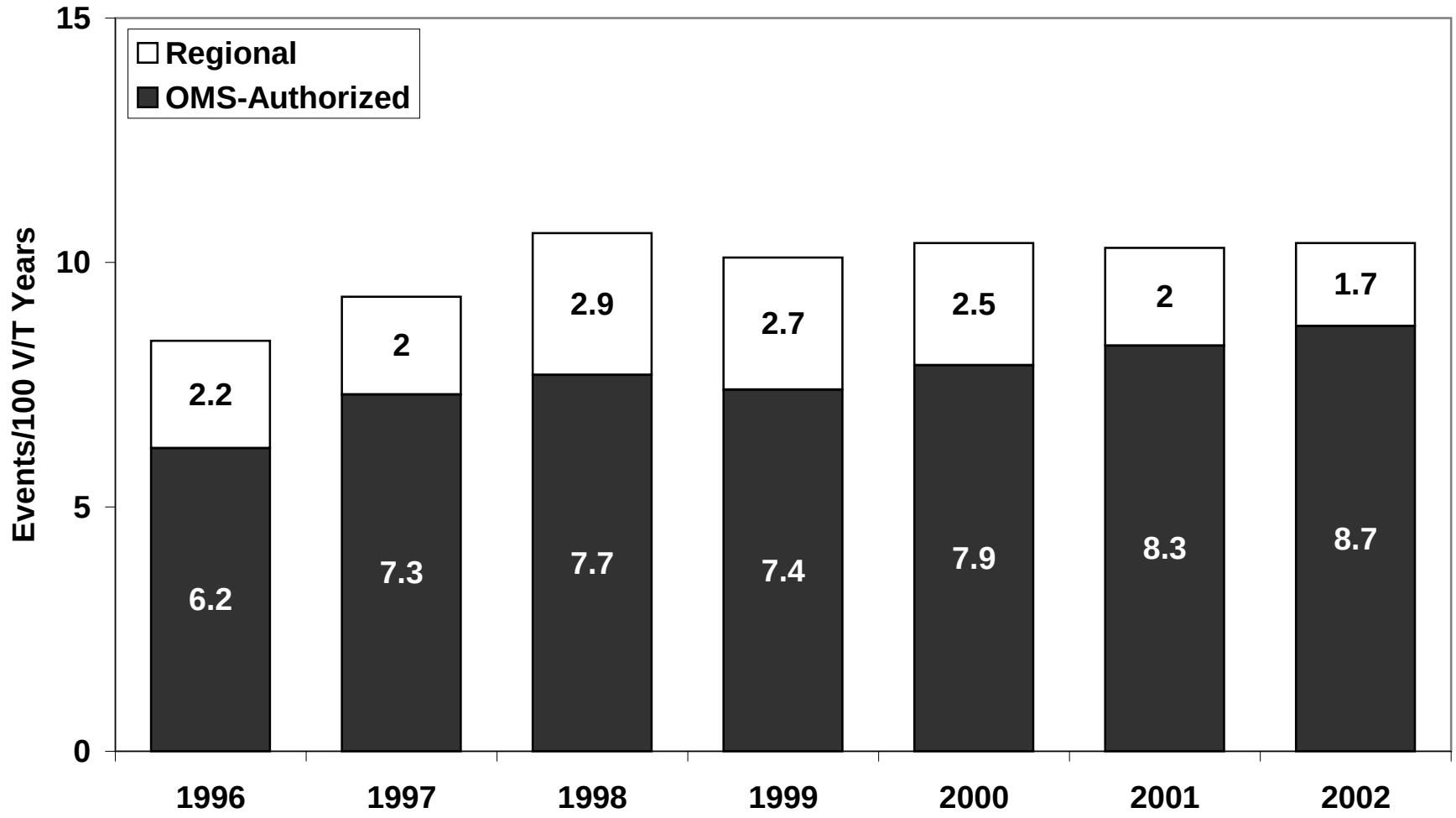
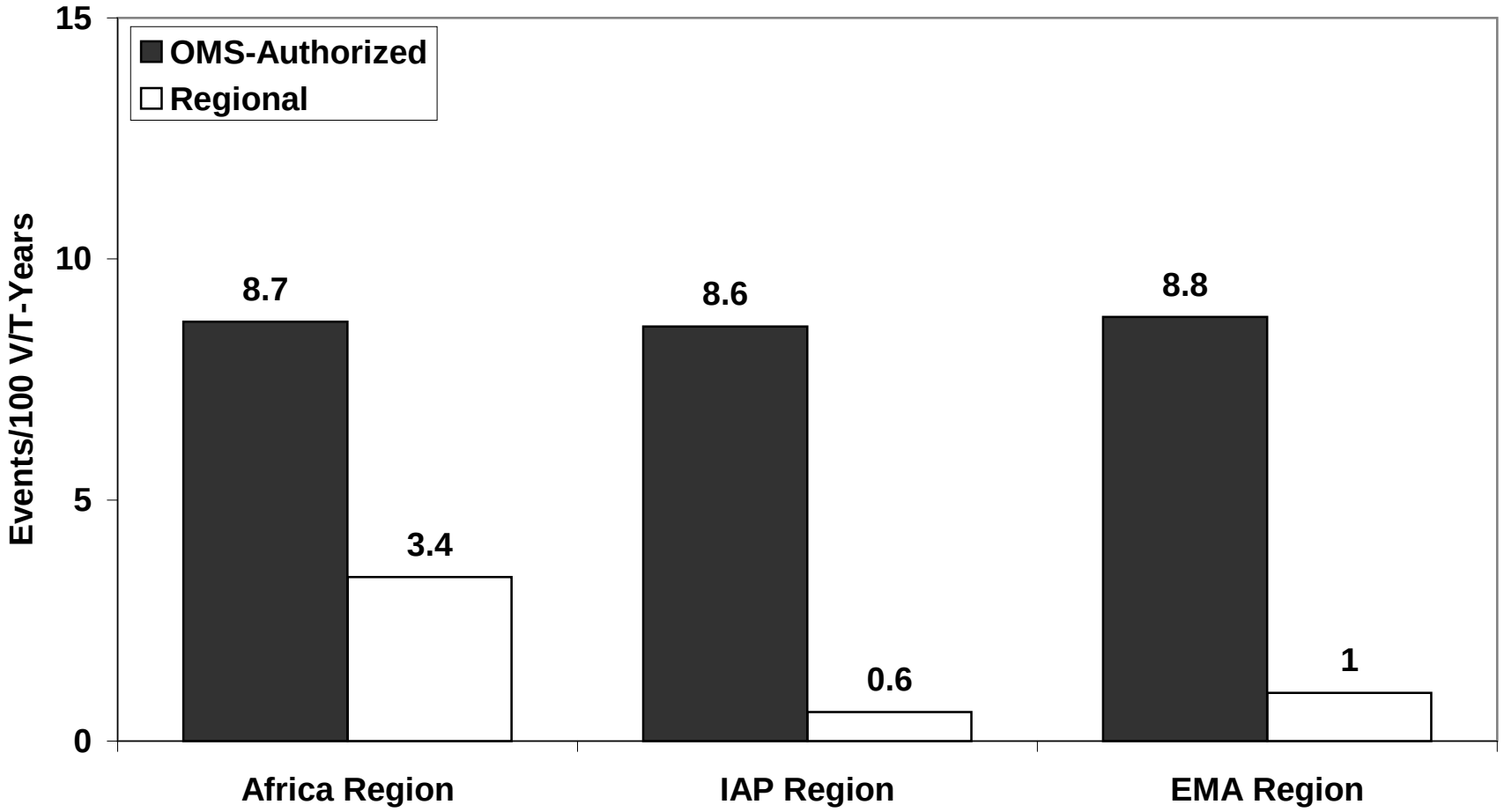


Figure 55

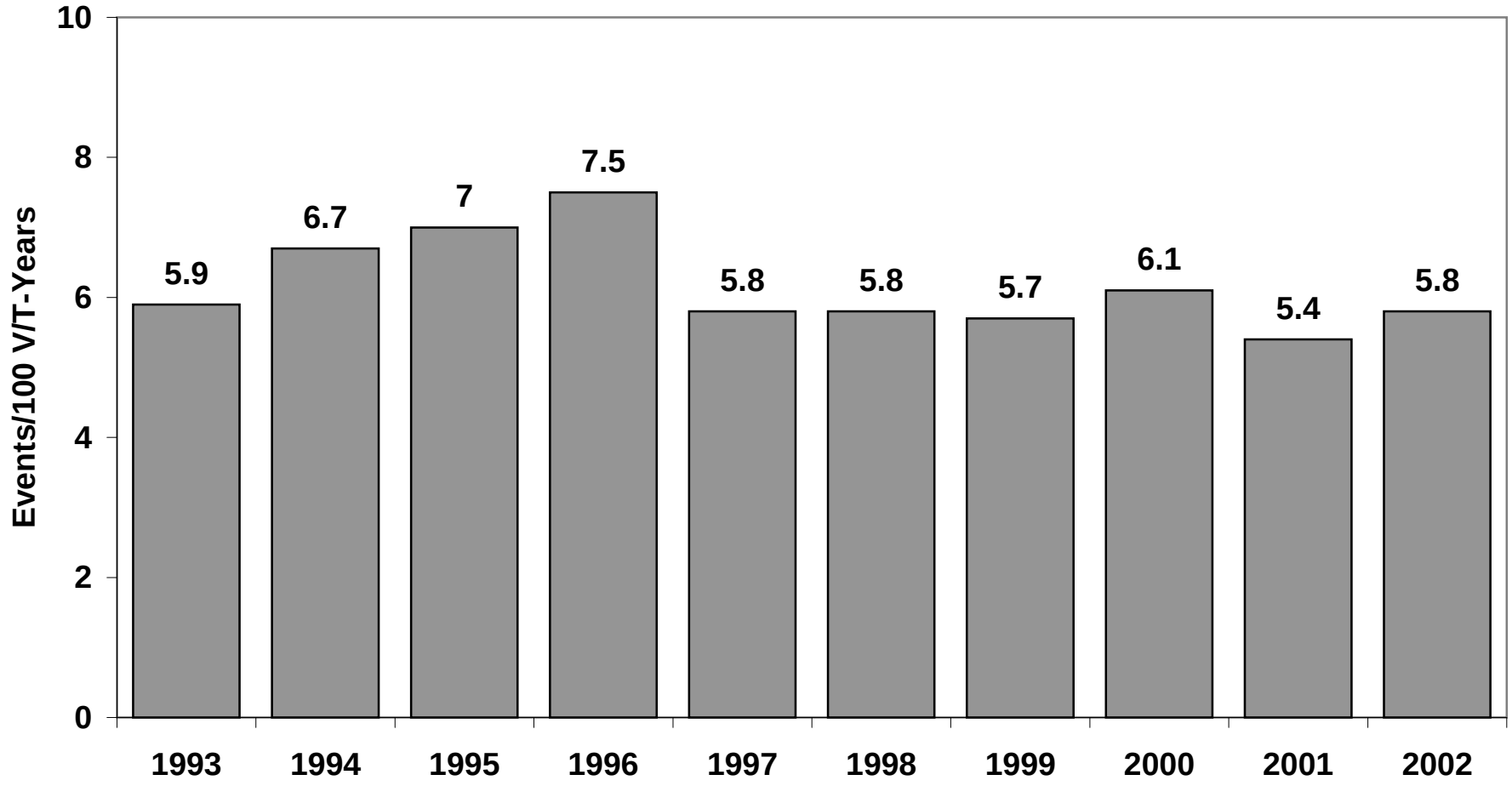
Incidence of Medical Evacuations



1993–2002 Volunteer Health Trends

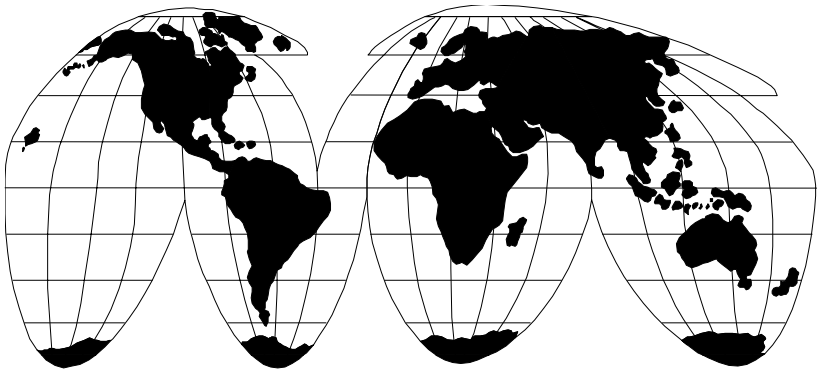
Figure 56

Incidence of In-Country Hospitalization



APPENDIX B

The Health of the Volunteer
2002 Annual Report



Graphic Displays

Table 1. In 2002, Numbers and Incidence of Reported Alcohol Problems and Cardiovascular Conditions

	# Rpts	V/T-Years	Alcohol Prob. No.	Alcohol Prob. Incidence	Cardiovasc. No.	Cardiovasc. Incidence
AFRICA Region						
BENIN	12	115	5	4.3	.	.
BURKINA FASO	12	80	1	1.2	.	.
CAMEROON	12	130	.	.	.	.
CAPE VERDE	12	48	2	4.2	1	2.1
COTE D'IVOIRE**	10	117	.	.	1	.9
GABON	12	56	2	3.6	.	.
GHANA	12	136	.	.	.	.
GUINEA	12	105	1	1.0	.	.
KENYA	12	132	.	.	.	.
LESOTHO	12	94	.	.	1	1.1
MADAGASCAR ***	7	44	3	6.9	.	.
MALAWI	12	120	1	.8	2	1.7
MALI	12	140	.	.	.	.
MAURITANIA	12	73	1	1.4	.	.
MOZAMBIQUE	12	46	3	6.6	.	.
NAMIBIA	12	83	.	.	.	.
NIGER	12	102	1	1.0	.	.
SENEGAL	12	133	6	4.5	4	3.0
SOUTH AFRICA	12	82	1	1.2	.	.
TANZANIA	12	110	5	4.5	1	.9
THE GAMBIA	12	89	.	.	.	.
TOGO	12	93	1	1.1	.	.
UGANDA	12	33	2	6.1	.	.
ZAMBIA	12	127	3	2.4	.	.
TOTAL AFRICA	281	2,286	38	1.7	10	.4
EMA Region						
ARMENIA	12	63	.	.	.	.
BANGLADESH *	5	5	.	.	.	.
BULGARIA	12	115	6	5.2	.	.
CHINA	12	86	4	4.6	5	5.8
ESTONIA **	7	10	.	.	.	.
GEORGIA	12	41	.	.	5	12.2
JORDAN **	11	56	.	.	3	5.3
KAZAKHSTAN	12	113	5	4.4	.	.
KYRGYZ REPUBL*	10	19	2	10.3	.	.
LATVIA **	7	13	.	.	1	7.6
LITHUANIA **	7	13	.	.	.	.
MACEDONIA *	2	3	.	.	.	.
MOLDOVA	12	94	7	7.4	.	.
MONGOLIA	12	78	3	3.9	3	3.9
MOROCCO	12	147	5	3.4	11	7.5
NEPAL	12	110	3	2.7	2	1.8
PHILIPPINES	12	135	4	3.0	3	2.2
ROMANIA	12	179	11	6.2	10	5.6
RUSSIA/FAR EAST	12	39	.	.	.	.
RUSSIA/WESTERN	12	70	1	1.4	1	1.4
SLOVAKIA **	7	22	.	.	.	.
THAILAND	12	60	.	.	.	.
TURKMENISTAN *	9	20	2	10.1	.	.
UKRAINE	12	183	2	1.1	3	1.6
UZBEKISTAN *	9	23	.	.	.	.
TOTAL EMA	254	1,695	55	3.2	47	2.8

IAP Region	# Rpts	V/T-Years	Alcohol Prob. No.	Alcohol Prob. Incidence	Cardiovasc. No.	Cardiovasc. Incidence
BELIZE	12	60	1	1.7	.	.
BOLIVIA	12	158	3	1.9	2	1.3
COSTA RICA	12	30	3	10.1	1	3.4
DOMINICAN REPUBL	12	138	1	.7	1	.7
EAST TIMOR *	7	9	.	.	.	.
EASTERN CARIBBEA	12	76	1	1.3	.	.
ECUADOR	12	154	8	5.2	.	.
EL SALVADOR	12	149	1	.7	5	3.4
GUATEMALA	12	247	.	.	4	1.6
GUYANA	12	43	2	4.6	2	4.6
HAITI	12	66	.	.	.	.
HONDURAS	12	248	1	.4	.	.
JAMAICA	12	89	.	.	.	.
KIRIBATI	12	54	1	1.9	.	.
MICRONESIA	12	66	2	3.0	.	.
NICARAGUA	12	174	1	.6	1	.6
PANAMA	12	110	.	.	.	.
PARAGUAY	12	204	.	.	3	1.5
PERU *	5	6	.	.	.	.
SAMOA	12	52	3	5.7	1	1.9
SURINAME	12	37	.	.	.	.
TONGA	12	71	.	.	.	.
VANUATU	12	54	.	.	.	.
TOTAL IAP	264	2,293	28	1.2	20	.9
ALL COUNTRIES	799	6,275	121	1.9	77	1.2

* Peace Corps countries opened or reopened in calendar year 2002: Bangladesh, East Timor, Kyrgyz Republic, Macedonia, Peru, Turkmenistan, Uzbekistan

** Peace Corps countries closed or suspended in calendar year 2002: Cote d'Ivoire, Estonia, Jordan, Latvia, Lithuania, Slovakia

*** Peace Corps country closed and reopened in calendar year 2002: Madagascar

Table does not include Bosnia, where only Crisis Corps Volunteers were present

Incidence = events/100 V/T-Years

Table 2. In 2002, Numbers and Incidence of Reported Dengue and Dental Problems

	# Rpts	V/T-Years	Dengue No.	Dengue Incidence	Dental No.	Dental Incidence
AFRICA Region						
BENIN	12	115	.	.	10	8.7
BURKINA FASO	12	80	.	.	28	34.9
CAMEROON	12	130	.	.	15	11.6
CAPE VERDE	12	48	.	.	14	29.1
COTE D'IVOIRE**	10	117	.	.	18	15.4
GABON	12	56	.	.	3	5.4
GHANA	12	136	1	.7	.	.
GUINEA	12	105	.	.	29	27.6
KENYA	12	132	.	.	12	9.1
LESOTHO	12	94	.	.	33	35.2
MADAGASCAR ***	7	44	.	.	6	13.7
MALAWI	12	120	.	.	17	14.2
MALI	12	140	.	.	24	17.2
MAURITANIA	12	73	.	.	12	16.5
MOZAMBIQUE	12	46	.	.	9	19.8
NAMIBIA	12	83	.	.	24	29.0
NIGER	12	102	.	.	20	19.6
SENEGAL	12	133	.	.	41	30.9
SOUTH AFRICA	12	82	.	.	21	25.5
TANZANIA	12	110	.	.	12	10.9
THE GAMBIA	12	89	1	1.1	21	23.6
TOGO	12	93	.	.	9	9.7
UGANDA	12	33	.	.	9	27.5
ZAMBIA	12	127	.	.	26	20.5
TOTAL AFRICA	281	2,286	2	<.1	413	18.1
EMA Region						
ARMENIA	12	63	.	.	4	6.4
BANGLADESH *	5	5	.	.	.	.
BULGARIA	12	115	.	.	50	43.6
CHINA	12	86	.	.	27	31.4
ESTONIA **	7	10	.	.	7	73.5
GEORGIA	12	41	.	.	32	77.8
JORDAN **	11	56	.	.	23	40.8
KAZAKHSTAN	12	113	.	.	53	46.8
KYRGYZ REPUBL*	10	19	.	.	3	15.5
LATVIA **	7	13	.	.	4	30.2
LITHUANIA **	7	13	.	.	13	98.7
MACEDONIA *	2	3	.	.	1	37.3
MOLDOVA	12	94	.	.	25	26.6
MONGOLIA	12	78	.	.	24	30.9
MOROCCO	12	147	.	.	61	41.4
NEPAL	12	110	.	.	40	36.5
PHILIPPINES	12	135	3	2.2	19	14.1
ROMANIA	12	179	.	.	74	41.4
RUSSIA/FAR EAST	12	39	.	.	27	69.0
RUSSIA/WESTERN	12	70	.	.	28	40.1
SLOVAKIA **	7	22	.	.	15	68.8
THAILAND	12	60	1	1.7	19	31.9
TURKMENISTAN *	9	20	.	.	.	.
UKRAINE	12	183	.	.	30	16.4
UZBEKISTAN *	9	23	.	.	1	4.3
TOTAL EMA	254	1,695	4	.2	580	34.2

	# Rpts	V/T-Years	Dengue No.	Dengue Incidence	Dental No.	Dental Incidence
IAP Region						
BELIZE	12	60	.	.	12	19.9
BOLIVIA	12	158	.	.	33	20.9
COSTA RICA	12	30	1	3.4	17	57.2
DOMINICAN REPUBL	12	138	1	.7	15	10.9
EAST TIMOR *	7	9	.	.	10	109
EASTERN CARIBBEA	12	76	7	9.2	72	95.1
ECUADOR	12	154	.	.	67	43.4
EL SALVADOR	12	149	1	.7	24	16.2
GUATEMALA	12	247	1	.4	88	35.7
GUYANA	12	43	4	9.3	7	16.3
HAITI	12	66	3	4.6	13	19.8
HONDURAS	12	248	6	2.4	36	14.5
JAMAICA	12	89	1	1.1	21	23.7
KIRIBATI	12	54	.	.	12	22.4
MICRONESIA	12	66	.	.	8	12.2
NICARAGUA	12	174	10	5.7	55	31.5
PANAMA	12	110	4	3.6	20	18.2
PARAGUAY	12	204	.	.	48	23.5
PERU *	5	6	.	.	1	16.9
SAMOA	12	52	.	.	16	30.6
SURINAME	12	37	.	.	10	26.9
TONGA	12	71	.	.	8	11.2
VANUATU	12	54	1	1.9	11	20.5
TOTAL IAP	264	2,293	40	1.7	604	26.3
ALL COUNTRIES	799	6,275	46	.7	1,597	25.5

* Peace Corps countries opened or reopened in calendar year 2002: Bangladesh, East Timor, Kyrgyz Republic, Macedonia, Peru, Turkmenistan, Uzbekistan

** Peace Corps countries closed or suspended in calendar year 2002: Cote d'Ivoire, Estonia, Jordan, Latvia, Lithuania, Slovakia

*** Peace Corps country closed and reopened in calendar year 2002: Madagascar

Table does not include Bosnia, where only Crisis Corps Volunteers were present

Incidence = events/100 V/T-Years

Table 3. In 2002, Numbers and Incidence of Reported Dermatitis and Environmental Concerns

	# Rpts	V/T-Years	Dermatitis No.	Dermatitis Incidence	Env. Concerns No.	Env. Concerns Incidence
AFRICA Region						
BENIN	12	115	56	48.5	6	5.2
BURKINA FASO	12	80	31	38.6	7	8.7
CAMEROON	12	130	9	6.9	.	.
CAPE VERDE	12	48	9	18.7	11	22.8
COTE D'IVOIRE**	10	117	97	83.0	.	.
GABON	12	56	8	14.3	.	.
GHANA	12	136	2	1.5	.	.
GUINEA	12	105	58	55.1	.	.
KENYA	12	132	15	11.4	.	.
LESOTHO	12	94	4	4.3	14	14.9
MADAGASCAR ***	7	44	18	41.1	.	.
MALAWI	12	120	15	12.5	1	.8
MALI	12	140	50	35.7	.	.
MAURITANIA	12	73	34	46.8	.	.
MOZAMBIQUE	12	46	7	15.4	.	.
NAMIBIA	12	83	12	14.5	.	.
NIGER	12	102	61	59.7	.	.
SENEGAL	12	133	155	117	.	.
SOUTH AFRICA	12	82	5	6.1	6	7.3
TANZANIA	12	110	35	31.7	3	2.7
THE GAMBIA	12	89	28	31.5	.	.
TOGO	12	93	4	4.3	.	.
UGANDA	12	33	19	58.1	6	18.3
ZAMBIA	12	127	6	4.7	.	.
TOTAL AFRICA	281	2,286	738	32.3	54	2.4
EMA Region						
ARMENIA	12	63	4	6.4	2	3.2
BANGLADESH *	5	5	2	39.3	.	.
BULGARIA	12	115	26	22.7	6	5.2
CHINA	12	86	15	17.4	42	48.8
ESTONIA **	7	10	.	.	.	.
GEORGIA	12	41	13	31.6	5	12.2
JORDAN **	11	56	7	12.4	.	.
KAZAKHSTAN	12	113	10	8.8	3	2.7
KYRGYZ REPUBL*	10	19	2	10.3	2	10.3
LATVIA **	7	13	1	7.6	.	.
LITHUANIA **	7	13	1	7.6	.	.
MACEDONIA *	2	3	.	.	.	.
MOLDOVA	12	94	36	38.3	1	1.1
MONGOLIA	12	78	1	1.3	5	6.4
MOROCCO	12	147	38	25.8	.	.
NEPAL	12	110	48	43.8	14	12.8
PHILIPPINES	12	135	24	17.8	.	.
ROMANIA	12	179	24	13.4	56	31.4
RUSSIA/FAR EAST	12	39	2	5.1	1	2.6
RUSSIA/WESTERN	12	70	13	18.6	1	1.4
SLOVAKIA **	7	22	11	50.5	.	.
THAILAND	12	60	33	55.4	.	.
TURKMENISTAN *	9	20	.	.	.	.
UKRAINE	12	183	58	31.7	7	3.8
UZBEKISTAN *	9	23	4	17.3	12	51.8
TOTAL EMA	254	1,695	373	22.0	157	9.3

IAP Region	# Rpts	V/T-Years	Dermatitis No.	Dermatitis Incidence	Env. Concerns No.	Env. Concerns Incidence
BELIZE	12	60	38	62.9	.	.
BOLIVIA	12	158	12	7.6	.	.
COSTA RICA	12	30	23	77.4	1	3.4
DOMINICAN REPUBL	12	138	48	34.9	.	.
EAST TIMOR *	7	9	6	65.1	.	.
EASTERN CARIBBEA	12	76	86	114	24	31.7
ECUADOR	12	154	94	60.9	12	7.8
EL SALVADOR	12	149	64	43.1	.	.
GUATEMALA	12	247	91	36.9	1	.4
GUYANA	12	43	7	16.3	.	.
HAITI	12	66	28	42.6	1	1.5
HONDURAS	12	248	73	29.5	51	20.6
JAMAICA	12	89	45	50.8	.	.
KIRIBATI	12	54	16	29.8	.	.
MICRONESIA	12	66	15	22.8	2	3.0
NICARAGUA	12	174	33	18.9	1	.6
PANAMA	12	110	46	41.8	.	.
PARAGUAY	12	204	33	16.2	24	11.8
PERU *	5	6	.	.	1	16.9
SAMOA	12	52	52	99.6	2	3.8
SURINAME	12	37	29	78.1	.	.
TONGA	12	71	25	35.0	.	.
VANUATU	12	54	44	81.9	6	11.2
TOTAL IAP	264	2,293	908	39.6	126	5.5
ALL COUNTRIES	799	6,275	2019	32.2	337	5.4

* Peace Corps countries opened or reopened in calendar year 2002: Bangladesh, East Timor, Kyrgyz Republic, Macedonia, Peru, Turkmenistan, Uzbekistan

** Peace Corps countries closed or suspended in calendar year 2002: Cote d'Ivoire, Estonia, Jordan, Latvia, Lithuania, Slovakia

*** Peace Corps country closed and reopened in calendar year 2002: Madagascar

Table does not include Bosnia, where only Crisis Corps Volunteers were present

Incidence = events/100 V/T-Years

Table 4. In 2002, Numbers and Incidence of Febrile Illness and Filariasis

	# Rpts	V/T-Years	Febrile Illness No.	Febrile Illness Incidence	Filariasis No.	Filariasis Incidence
AFRICA Region						
BENIN	12	115	25	21.7	.	.
BURKINA FASO	12	80	20	24.9	.	.
CAMEROON	12	130	28	21.6	1	.8
CAPE VERDE	12	48	14	29.1	.	.
COTE D'IVOIRE**	10	117	21	18.0	.	.
GABON	12	56	11	19.7	.	.
GHANA	12	136	9	6.6	.	.
GUINEA	12	105	5	4.8	.	.
KENYA	12	132	19	14.4	.	.
LESOTHO	12	94	4	4.3	1	1.1
MADAGASCAR ***	7	44	4	9.1	.	.
MALAWI	12	120	14	11.7	.	.
MALI	12	140	15	10.7	.	.
MAURITANIA	12	73	12	16.5	.	.
MOZAMBIQUE	12	46	14	30.7	.	.
NAMIBIA	12	83	1	1.2	.	.
NIGER	12	102	20	19.6	.	.
SENEGAL	12	133	37	27.9	.	.
SOUTH AFRICA	12	82	20	24.3	.	.
TANZANIA	12	110	28	25.3	.	.
THE GAMBIA	12	89	5	5.6	.	.
TOGO	12	93	4	4.3	.	.
UGANDA	12	33	8	24.5	.	.
ZAMBIA	12	127	15	11.8	.	.
TOTAL AFRICA	281	2,286	353	15.4	2	<.1
EMA Region						
ARMENIA	12	63	30	47.9	.	.
BANGLADESH *	5	5	3	58.9	.	.
BULGARIA	12	115	5	4.4	.	.
CHINA	12	86	18	20.9	.	.
ESTONIA **	7	10	10	105	.	.
GEORGIA	12	41	1	2.4	.	.
JORDAN **	11	56	.	.	.	.
KAZAKHSTAN	12	113	8	7.1	.	.
KYRGYZ REPUBL*	10	19	.	.	.	.
LATVIA **	7	13	7	52.9	.	.
LITHUANIA **	7	13	2	15.2	.	.
MACEDONIA *	2	3	.	.	.	.
MOLDOVA	12	94	.	.	.	.
MONGOLIA	12	78	1	1.3	.	.
MOROCCO	12	147	46	31.2	.	.
NEPAL	12	110	29	26.5	.	.
PHILIPPINES	12	135	8	5.9	.	.
ROMANIA	12	179	13	7.3	.	.
RUSSIA/FAR EAST	12	39	7	17.9	.	.
RUSSIA/WESTERN	12	70	24	34.4	.	.
SLOVAKIA **	7	22	11	50.5	.	.
THAILAND	12	60	11	18.5	.	.
TURKMENISTAN *	9	20	3	15.1	.	.
UKRAINE	12	183	8	4.4	.	.
UZBEKISTAN *	9	23	15	64.8	.	.
TOTAL EMA	254	1,695	260	15.3	.	.

IAP Region	# Rpts	V/T-Years	Febrile Illness No.	Febrile Illness Incidence	Filariasis No.	Filariasis Incidence
BELIZE	12	60	2	3.3	.	.
BOLIVIA	12	158	5	3.2	.	.
COSTA RICA	12	30	14	47.1	.	.
DOMINICAN REPUBL	12	138	62	45.1	.	.
EAST TIMOR *	7	9	3	32.6	.	.
EASTERN CARIBBEA	12	76	50	66.0	.	.
ECUADOR	12	154	21	13.6	.	.
EL SALVADOR	12	149	9	6.1	.	.
GUATEMALA	12	247	15	6.1	.	.
GUYANA	12	43	4	9.3	.	.
HAITI	12	66	17	25.9	.	.
HONDURAS	12	248	15	6.1	.	.
JAMAICA	12	89	15	16.9	.	.
KIRIBATI	12	54	1	1.9	.	.
MICRONESIA	12	66	14	21.3	.	.
NICARAGUA	12	174	7	4.0	.	.
PANAMA	12	110	1	.9	.	.
PARAGUAY	12	204	43	21.1	.	.
PERU *	5	6	5	84.4	.	.
SAMOA	12	52	3	5.7	.	.
SURINAME	12	37	6	16.1	.	.
TONGA	12	71	8	11.2	.	.
VANUATU	12	54	44	81.9	.	.
TOTAL IAP	264	2,293	364	15.9	.	.
ALL COUNTRIES	799	6,275	977	15.6	2	<.1

* Peace Corps countries opened or reopened in calendar year 2002: Bangladesh, East Timor, Kyrgyz Republic, Macedonia, Peru, Turkmenistan, Uzbekistan

** Peace Corps countries closed or suspended in calendar year 2002: Cote d'Ivoire, Estonia, Jordan, Latvia, Lithuania, Slovakia

*** Peace Corps country closed and reopened in calendar year 2002: Madagascar

Table does not include Bosnia, where only Crisis Corps Volunteers were present

Incidence = events/100 V/T-Years

Table 5. In 2002, Numbers and Incidence of Reported Gastrointestinal Problems (Diarrhea)[1] and Helminths

	# Rpts	V/T-Years	Diarrhea No.	Diarrhea Incidence	Helminths No.	Helminths Incidence
AFRICA Region						
BENIN	12	115	182	158	1	.9
BURKINA FASO	12	80	191	238	1	1.2
CAMEROON	12	130	80	61.7	6	4.6
CAPE VERDE	12	48	47	97.5	.	.
COTE D'IVOIRE**	10	117	130	111	4	3.4
GABON	12	56	9	16.1	3	5.4
GHANA	12	136	25	18.4	1	.7
GUINEA	12	105	83	78.9	5	4.8
KENYA	12	132	51	38.7	.	.
LESOTHO	12	94	31	33.1	1	1.1
MADAGASCAR ***	7	44	40	91.4	2	4.6
MALAWI	12	120	75	62.7	.	.
MALI	12	140	193	138	.	.
MAURITANIA	12	73	60	82.5	1	1.4
MOZAMBIQUE	12	46	29	63.7	4	8.8
NAMIBIA	12	83	38	46.0	7	8.5
NIGER	12	102	179	175	.	.
SENEGAL	12	133	206	155	2	1.5
SOUTH AFRICA	12	82	15	18.2	.	.
TANZANIA	12	110	63	57.0	1	.9
THE GAMBIA	12	89	68	76.5	.	.
TOGO	12	93	95	102	1	1.1
UGANDA	12	33	58	177	3	9.2
ZAMBIA	12	127	51	40.2	.	.
TOTAL AFRICA	281	2,286	1,999	87.4	43	1.9
EMA Region						
ARMENIA	12	63	99	158	.	.
BANGLADESH *	5	5	16	314	.	.
BULGARIA	12	115	12	10.5	3	2.6
CHINA	12	86	38	44.1	1	1.2
ESTONIA **	7	10	3	31.5	.	.
GEORGIA	12	41	39	94.8	.	.
JORDAN **	11	56	47	83.3	.	.
KAZAKHSTAN	12	113	28	24.7	.	.
KYRGYZ REPUBL*	10	19	9	46.4	.	.
LATVIA **	7	13	.	.	.	.
LITHUANIA **	7	13	25	190	.	.
MACEDONIA *	2	3	.	.	.	.
MOLDOVA	12	94	49	52.1	2	2.1
MONGOLIA	12	78	63	81.1	10	12.9
MOROCCO	12	147	131	88.9	2	1.4
NEPAL	12	110	118	108	6	5.5
PHILIPPINES	12	135	26	19.3	3	2.2
ROMANIA	12	179	114	63.8	1	.6
RUSSIA/FAR EAST	12	39	12	30.7	.	.
RUSSIA/WESTERN	12	70	15	21.5	.	.
SLOVAKIA **	7	22	9	41.3	.	.
THAILAND	12	60	22	37.0	.	.
TURKMENISTAN *	9	20	64	322	.	.
UKRAINE	12	183	41	22.4	.	.
UZBEKISTAN *	9	23	45	194	.	.
TOTAL EMA	254	1,695	1,025	60.5	28	1.7

	# Rpts	V/T-Years	Diarrhea No.	Diarrhea Incidence	Helminths No.	Helminths Incidence
IAP Region						
BELIZE	12	60	30	49.7	.	.
BOLIVIA	12	158	401	254	7	4.4
COSTA RICA	12	30	21	70.7	.	.
DOMINICAN REPUBL	12	138	115	83.6	3	2.2
EAST TIMOR *	7	9	7	76.0	.	.
EASTERN CARIBBEA	12	76	53	70.0	2	2.6
ECUADOR	12	154	155	101	10	6.5
EL SALVADOR	12	149	225	151	6	4.0
GUATEMALA	12	247	294	119	13	5.3
GUYANA	12	43	8	18.6	.	.
HAITI	12	66	155	236	53	80.6
HONDURAS	12	248	75	30.3	.	.
JAMAICA	12	89	19	21.4	2	2.3
KIRIBATI	12	54	42	78.3	1	1.9
MICRONESIA	12	66	32	48.7	4	6.1
NICARAGUA	12	174	201	115	4	2.3
PANAMA	12	110	58	52.7	3	2.7
PARAGUAY	12	204	75	36.7	4	2.0
PERU *	5	6	10	169	.	.
SAMOA	12	52	34	65.1	.	.
SURINAME	12	37	28	75.4	11	29.6
TONGA	12	71	32	44.9	.	.
VANUATU	12	54	24	44.7	.	.
TOTAL IAP	264	2,293	2,094	91.3	123	5.4
ALL COUNTRIES	799	6,275	5,118	81.6	194	3.1

[1] Diarrhea includes all field-confirmed cases of amebiasis, giardiasis, salmonellosis, shigellosis, and "other" diarrheal conditions as defined in OMS Technical Guideline 410

* Peace Corps countries opened or reopened in calendar year 2002: Bangladesh, East Timor, Kyrgyz Republic, Macedonia, Peru, Turkmenistan, Uzbekistan

** Peace Corps countries closed or suspended in calendar year 2002: Cote d'Ivoire, Estonia, Jordan, Latvia, Lithuania, Slovakia

*** Peace Corps country closed and reopened in calendar year 2002: Madagascar

Table does not include Bosnia, where only Crisis Corps Volunteers were present

Incidence = events/100 V/T-Years

Table 6. In 2002, Numbers and Incidence of Reported Hepatitis and Hospitalizations

	# Rpts	V/T-Years	Hepatitis No.	Hepatitis Incidence	Hospitaliz. No.	Hospitaliz. Incidence
AFRICA Region						
BENIN	12	115	.	.	3	2.6
BURKINA FASO	12	80	.	.	.	.
CAMEROON	12	130	.	.	5	3.9
CAPE VERDE	12	48	.	.	.	.
COTE D'IVOIRE**	10	117	.	.	5	4.3
GABON	12	56	.	.	1	1.8
GHANA	12	136	.	.	.	.
GUINEA	12	105	2	1.9	4	3.8
KENYA	12	132	1	.8	12	9.1
LESOTHO	12	94	.	.	4	4.3
MADAGASCAR ***	7	44	.	.	1	2.3
MALAWI	12	120	.	.	9	7.5
MALI	12	140	1	.7	1	.7
MAURITANIA	12	73	.	.	.	.
MOZAMBIQUE	12	46	1	2.2	.	.
NAMIBIA	12	83	.	.	8	9.7
NIGER	12	102	.	.	3	2.9
SENEGAL	12	133	.	.	4	3.0
SOUTH AFRICA	12	82	.	.	6	7.3
TANZANIA	12	110	.	.	2	1.8
THE GAMBIA	12	89	.	.	1	1.1
TOGO	12	93	.	.	1	1.1
UGANDA	12	33	.	.	.	.
ZAMBIA	12	127	.	.	8	6.3
TOTAL AFRICA	281	2,286	5	.2	78	3.4
EMA Region						
ARMENIA	12	63	.	.	.	.
BANGLADESH *	5	5	.	.	.	.
BULGARIA	12	115	.	.	.	.
CHINA	12	86	.	.	2	2.3
ESTONIA **	7	10	.	.	.	.
GEORGIA	12	41	.	.	.	.
JORDAN **	11	56	.	.	7	12.4
KAZAKHSTAN	12	113	.	.	.	.
KYRGYZ REPUBL*	10	19	.	.	1	5.2
LATVIA **	7	13	.	.	.	.
LITHUANIA **	7	13	.	.	.	.
MACEDONIA *	2	3	.	.	.	.
MOLDOVA	12	94	.	.	2	2.1
MONGOLIA	12	78	.	.	4	5.1
MOROCCO	12	147	.	.	1	.7
NEPAL	12	110	1	.9	6	5.5
PHILIPPINES	12	135	.	.	32	23.8
ROMANIA	12	179	2	1.1	1	.6
RUSSIA/FAR EAST	12	39	.	.	.	.
RUSSIA/WESTERN	12	70	.	.	1	1.4
SLOVAKIA **	7	22	.	.	.	.
THAILAND	12	60	.	.	10	16.8
TURKMENISTAN *	9	20	.	.	.	.
UKRAINE	12	183	.	.	4	2.2
UZBEKISTAN *	9	23	.	.	.	.
TOTAL EMA	254	1,695	3	.2	71	4.2

	# Rpts	V/T-Years	Hepatitis No.	Hepatitis Incidence	Hospitaliz. No.	Hospitaliz. Incidence
IAP Region						
BELIZE	12	60	.	.	3	5.0
BOLIVIA	12	158	.	.	23	14.6
COSTA RICA	12	30	.	.	2	6.7
DOMINICAN REPUBL	12	138	.	.	19	13.8
EAST TIMOR *	7	9	.	.	1	10.9
EASTERN CARIBBEA	12	76	.	.	.	.
ECUADOR	12	154	.	.	6	3.9
EL SALVADOR	12	149	.	.	28	18.9
GUATEMALA	12	247	.	.	45	18.3
GUYANA	12	43	.	.	4	9.3
HAITI	12	66	.	.	1	1.5
HONDURAS	12	248	.	.	50	20.2
JAMAICA	12	89	.	.	1	1.1
KIRIBATI	12	54	.	.	.	.
MICRONESIA	12	66	1	1.5	12	18.3
NICARAGUA	12	174	2	1.1	1	.6
PANAMA	12	110	1	.9	11	10.0
PARAGUAY	12	204	.	.	2	1.0
PERU *	5	6	.	.	.	.
SAMOA	12	52	.	.	3	5.7
SURINAME	12	37	.	.	.	.
TONGA	12	71	.	.	1	1.4
VANUATU	12	54	.	.	1	1.9
TOTAL IAP	264	2,293	4	.2	214	9.3
ALL COUNTRIES	799	6,275	12	.2	363	5.8

* Peace Corps countries opened or reopened in calendar year 2002: Bangladesh, East Timor, Kyrgyz Republic, Macedonia, Peru, Turkmenistan, Uzbekistan

** Peace Corps countries closed or suspended in calendar year 2002: Cote d'Ivoire, Estonia, Jordan, Latvia, Lithuania, Slovakia

*** Peace Corps country closed and reopened in calendar year 2002: Madagascar

Table does not include Bosnia, where only Crisis Corps Volunteers were present

Incidence = events/100 V/T-Years

Table 7. In 2002, Numbers and Incidence of Reported Pedestrian and Bicycle Injuries

	# Rpts	V/T-Years	Pedestrian Inj. No.	Pedestrian Inj. Incidence	Bicycle Inj. No.	Bicycle Inj. Incidence
AFRICA Region						
BENIN	12	115	1	.9	3	2.6
BURKINA FASO	12	80	2	2.5	7	8.7
CAMEROON	12	130	.	.	3	2.3
CAPE VERDE	12	48	2	4.2	.	.
COTE D'IVOIRE**	10	117	1	.9	4	3.4
GABON	12	56	.	.	12	21.5
GHANA	12	136	1	.7	2	1.5
GUINEA	12	105	1	1.0	4	3.8
KENYA	12	132	.	.	2	1.5
LESOTHO	12	94	5	5.3	1	1.1
MADAGASCAR ***	7	44	.	.	.	.
MALAWI	12	120	.	.	4	3.3
MALI	12	140	3	2.1	7	5.0
MAURITANIA	12	73	1	1.4	.	.
MOZAMBIQUE	12	46	.	.	.	.
NAMIBIA	12	83	3	3.6	.	.
NIGER	12	102	.	.	.	.
SENEGAL	12	133	.	.	3	2.3
SOUTH AFRICA	12	82	1	1.2	.	.
TANZANIA	12	110	.	.	1	.9
THE GAMBIA	12	89	.	.	1	1.1
TOGO	12	93	4	4.3	3	3.2
UGANDA	12	33	.	.	.	.
ZAMBIA	12	127	2	1.6	5	3.9
TOTAL AFRICA	281	2,286	27	1.2	62	2.7
EMA Region						
ARMENIA	12	63	.	.	.	.
BANGLADESH *	5	5	.	.	.	.
BULGARIA	12	115	.	.	1	.9
CHINA	12	86	1	1.2	.	.
ESTONIA **	7	10	1	10.5	.	.
GEORGIA	12	41	.	.	.	.
JORDAN **	11	56	.	.	.	.
KAZAKHSTAN	12	113	.	.	1	.9
KYRGYZ REPUBL*	10	19	.	.	.	.
LATVIA **	7	13	1	7.6	.	.
LITHUANIA **	7	13	.	.	.	.
MACEDONIA *	2	3	.	.	.	.
MOLDOVA	12	94	.	.	.	.
MONGOLIA	12	78	.	.	.	.
MOROCCO	12	147	3	2.0	.	.
NEPAL	12	110	1	.9	7	6.4
PHILIPPINES	12	135	.	.	.	.
ROMANIA	12	179	.	.	.	.
RUSSIA/FAR EAST	12	39	1	2.6	.	.
RUSSIA/WESTERN	12	70	2	2.9	.	.
SLOVAKIA **	7	22	.	.	.	.
THAILAND	12	60	1	1.7	5	8.4
TURKMENISTAN *	9	20	.	.	.	.
UKRAINE	12	183	.	.	.	.
UZBEKISTAN *	9	23	3	13.0	.	.
TOTAL EMA	254	1,695	14	.8	14	.8

	# Rpts	V/T-Years	Pedestrian Inj. No.	Pedestrian Inj. Incidence	Bicycle Inj. No.	Bicycle Inj. Incidence
IAP Region						
BELIZE	12	60	1	1.7	2	3.3
BOLIVIA	12	158	.	.	.	.
COSTA RICA	12	30	.	.	1	3.4
DOMINICAN REPUBL	12	138	.	.	2	1.5
EAST TIMOR *	7	9	.	.	.	.
EASTERN CARIBBEA	12	76	3	4.0	.	.
ECUADOR	12	154	1	.6	1	.6
EL SALVADOR	12	149	.	.	.	.
GUATEMALA	12	247	3	1.2	4	1.6
GUYANA	12	43	.	.	1	2.3
HAITI	12	66	.	.	2	3.0
HONDURAS	12	248	1	.4	.	.
JAMAICA	12	89	.	.	.	.
KIRIBATI	12	54	1	1.9	.	.
MICRONESIA	12	66	.	.	1	1.5
NICARAGUA	12	174	.	.	1	.6
PANAMA	12	110	1	.9	.	.
PARAGUAY	12	204	15	7.3	3	1.5
PERU *	5	6	.	.	.	.
SAMOA	12	52	.	.	1	1.9
SURINAME	12	37	.	.	1	2.7
TONGA	12	71	.	.	6	8.4
VANUATU	12	54	.	.	.	.
TOTAL IAP	264	2,293	26	1.1	26	1.1
ALL COUNTRIES	799	6,275	67	1.1	102	1.6

* Peace Corps countries opened or reopened in calendar year 2002: Bangladesh, East Timor, Kyrgyz Republic, Macedonia, Peru, Turkmenistan, Uzbekistan

** Peace Corps countries closed or suspended in calendar year 2002: Cote d'Ivoire, Estonia, Jordan, Latvia, Lithuania, Slovakia

*** Peace Corps country closed and reopened in calendar year 2002: Madagascar

Table does not include Bosnia, where only Crisis Corps Volunteers were present

Incidence = events/100 V/T-Years

Table 8. In 2002, Numbers and Incidence of Reported Motorcycle and Motor Vehicle Injuries

	# Rpts	V/T-Years	Motorcycle No.	Motorcycle Incidence	Motor Vehicle No.	Motor Vehicle Incidence
AFRICA Region						
BENIN	12	115	2	1.7	1	.9
BURKINA FASO	12	80	3	3.7	1	1.2
CAMEROON	12	130	1	.8	3	2.3
CAPE VERDE	12	48	.	.	.	.
COTE D'IVOIRE**	10	117	1	.9	3	2.6
GABON	12	56	.	.	.	.
GHANA	12	136	1	.7	1	.7
GUINEA	12	105	.	.	7	6.7
KENYA	12	132	.	.	3	2.3
LESOTHO	12	94	.	.	1	1.1
MADAGASCAR ***	7	44	.	.	.	.
MALAWI	12	120	.	.	3	2.5
MALI	12	140	3	2.1	2	1.4
MAURITANIA	12	73	.	.	1	1.4
MOZAMBIQUE	12	46	.	.	.	.
NAMIBIA	12	83	.	.	1	1.2
NIGER	12	102	.	.	.	.
SENEGAL	12	133	.	.	4	3.0
SOUTH AFRICA	12	82	.	.	.	.
TANZANIA	12	110	.	.	1	.9
THE GAMBIA	12	89	.	.	.	.
TOGO	12	93	.	.	1	1.1
UGANDA	12	33	.	.	1	3.1
ZAMBIA	12	127	.	.	.	.
TOTAL AFRICA	281	2,286	11	.5	34	1.5

	# Rpts	V/T-Years	Motorcycle No.	Motorcycle Incidence	Motor Vehicle No.	Motor Vehicle Incidence
EMA Region						
ARMENIA	12	63	.	.	.	.
BANGLADESH *	5	5	.	.	.	.
BULGARIA	12	115	.	.	1	.9
CHINA	12	86	.	.	.	.
ESTONIA **	7	10	.	.	.	.
GEORGIA	12	41	.	.	.	.
JORDAN **	11	56	.	.	.	.
KAZAKHSTAN	12	113	.	.	.	.
KYRGYZ REPUBL*	10	19	.	.	.	.
LATVIA **	7	13	.	.	.	.
LITHUANIA **	7	13	.	.	.	.
MACEDONIA *	2	3	.	.	.	.
MOLDOVA	12	94	.	.	.	.
MONGOLIA	12	78	.	.	4	5.1
MOROCCO	12	147	.	.	.	.
NEPAL	12	110	.	.	.	.
PHILIPPINES	12	135	1	.7	1	.7
ROMANIA	12	179	.	.	.	.
RUSSIA/FAR EAST	12	39	.	.	.	.
RUSSIA/WESTERN	12	70	.	.	.	.
SLOVAKIA **	7	22	.	.	.	.
THAILAND	12	60	.	.	5	8.4
TURKMENISTAN *	9	20	.	.	.	.
UKRAINE	12	183	.	.	.	.
UZBEKISTAN *	9	23	.	.	.	.
TOTAL EMA	254	1,695	1	.1	11	.6

	# Rpts	V/T-Years	Motorcycle No.	Motorcycle Incidence	Motor Vehicle No.	Motor Vehicle Incidence
IAP Region						
BELIZE	12	60	.	.	2	3.3
BOLIVIA	12	158	.	.	2	1.3
COSTA RICA	12	30	.	.	1	3.4
DOMINICAN REPUBL	12	138	2	1.5	1	.7
EAST TIMOR *	7	9	.	.	.	.
EASTERN CARIBBEA	12	76	.	.	.	.
ECUADOR	12	154	1	.6	1	.6
EL SALVADOR	12	149	.	.	4	2.7
GUATEMALA	12	247	1	.4	8	3.2
GUYANA	12	43	.	.	.	.
HAITI	12	66	.	.	1	1.5
HONDURAS	12	248	.	.	.	.
JAMAICA	12	89	.	.	.	.
KIRIBATI	12	54	.	.	.	.
MICRONESIA	12	66	.	.	1	1.5
NICARAGUA	12	174	.	.	.	.
PANAMA	12	110	.	.	10	9.1
PARAGUAY	12	204	.	.	.	.
PERU *	5	6	.	.	.	.
SAMOA	12	52	.	.	.	.
SURINAME	12	37	.	.	.	.
TONGA	12	71	.	.	.	.
VANUATU	12	54	.	.	.	.
TOTAL IAP	264	2,293	4	.2	31	1.4
ALL COUNTRIES	799	6,275	16	.3	76	1.2

* Peace Corps countries opened or reopened in calendar year 2002: Bangladesh, East Timor, Kyrgyz Republic, Macedonia, Peru, Turkmenistan, Uzbekistan

** Peace Corps countries closed or suspended in calendar year 2002: Cote d'Ivoire, Estonia, Jordan, Latvia, Lithuania, Slovakia

*** Peace Corps country closed and reopened in calendar year 2002: Madagascar

Table does not include Bosnia, where only Crisis Corps Volunteers were present

Incidence = events/100 V/T-Years

Table 9. In 2002, Numbers and Incidence of Reported Sports- and Assault-Related Injuries

	# Rpts	V/T-Years	Sports Inj. No.	Sports Inj. Incidence	Assault Inj. No.	Assault Inj. Incidence
AFRICA Region						
BENIN	12	115	.	.	.	.
BURKINA FASO	12	80	4	5.0	.	.
CAMEROON	12	130	.	.	1	.8
CAPE VERDE	12	48	1	2.1	3	6.2
COTE D'IVOIRE**	10	117	.	.	.	.
GABON	12	56	.	.	1	1.8
GHANA	12	136	.	.	5	3.7
GUINEA	12	105	2	1.9	1	1.0
KENYA	12	132	.	.	2	1.5
LESOTHO	12	94	3	3.2	5	5.3
MADAGASCAR ***	7	44	3	6.9	.	.
MALAWI	12	120	3	2.5	1	.8
MALI	12	140	3	2.1	2	1.4
MAURITANIA	12	73	10	13.8	.	.
MOZAMBIQUE	12	46	1	2.2	3	6.6
NAMIBIA	12	83	2	2.4	.	.
NIGER	12	102	1	1.0	.	.
SENEGAL	12	133	10	7.5	1	.8
SOUTH AFRICA	12	82	3	3.6	.	.
TANZANIA	12	110	2	1.8	5	4.5
THE GAMBIA	12	89	1	1.1	.	.
TOGO	12	93	2	2.2	.	.
UGANDA	12	33	.	.	1	3.1
ZAMBIA	12	127	.	.	2	1.6
TOTAL AFRICA	**281**	**2,286**	**51**	**2.2**	**33**	**1.4**
EMA Region						
ARMENIA	12	63	3	4.8	.	.
BANGLADESH *	5	5	2	39.3	.	.
BULGARIA	12	115	4	3.5	3	2.6
CHINA	12	86	3	3.5	.	.
ESTONIA **	7	10	1	10.5	.	.
GEORGIA	12	41	.	.	2	4.9
JORDAN **	11	56	.	.	1	1.8
KAZAKHSTAN	12	113	7	6.2	2	1.8
KYRGYZ REPUBL*	10	19	2	10.3	.	.
LATVIA **	7	13	.	.	.	.
LITHUANIA **	7	13	2	15.2	.	.
MACEDONIA *	2	3	.	.	.	.
MOLDOVA	12	94	5	5.3	2	2.1
MONGOLIA	12	78	4	5.1	1	1.3
MOROCCO	12	147	1	.7	1	.7
NEPAL	12	110	2	1.8	2	1.8
PHILIPPINES	12	135	.	.	2	1.5
ROMANIA	12	179	27	15.1	1	.6
RUSSIA/FAR EAST	12	39	1	2.6	1	2.6
RUSSIA/WESTERN	12	70	1	1.4	.	.
SLOVAKIA **	7	22	3	13.8	.	.
THAILAND	12	60	2	3.4	1	1.7
TURKMENISTAN *	9	20	.	.	.	.
UKRAINE	12	183	9	4.9	4	2.2
UZBEKISTAN *	9	23	1	4.3	.	.
TOTAL EMA	**254**	**1,695**	**80**	**4.7**	**23**	**1.4**

	# Rpts	V/T-Years	Sports Inj. No.	Sports Inj. Incidence	Assault Inj. No.	Assault Inj. Incidence
IAP Region						
BELIZE	12	60	5	8.3	2	3.3
BOLIVIA	12	158	.	.	2	1.3
COSTA RICA	12	30	.	.	.	.
DOMINICAN REPUBL	12	138	3	2.2	.	.
EAST TIMOR *	7	9	1	10.9	.	.
EASTERN CARIBBEA	12	76	3	4.0	1	1.3
ECUADOR	12	154	13	8.4	3	1.9
EL SALVADOR	12	149	22	14.8	1	.7
GUATEMALA	12	247	22	8.9	1	.4
GUYANA	12	43	.	.	1	2.3
HAITI	12	66	3	4.6	.	.
HONDURAS	12	248	9	3.6	.	.
JAMAICA	12	89	4	4.5	1	1.1
KIRIBATI	12	54	2	3.7	2	3.7
MICRONESIA	12	66	1	1.5	.	.
NICARAGUA	12	174	2	1.1	2	1.1
PANAMA	12	110	.	.	1	.9
PARAGUAY	12	204	19	9.3	.	.
PERU *	5	6	1	16.9	.	.
SAMOA	12	52	3	5.7	.	.
SURINAME	12	37	2	5.4	.	.
TONGA	12	71	3	4.2	1	1.4
VANUATU	12	54	10	18.6	1	1.9
TOTAL IAP	**264**	**2,293**	**128**	**5.6**	**19**	**.8**
ALL COUNTRIES	**799**	**6,275**	**259**	**4.1**	**75**	**1.2**

* Peace Corps countries opened or reopened in calendar year 2002: Bangladesh, East Timor, Kyrgyz Republic, Macedonia, Peru, Turkmenistan, Uzbekistan

** Peace Corps countries closed or suspended in calendar year 2002: Cote d'Ivoire, Estonia, Jordan, Latvia, Lithuania, Slovakia

*** Peace Corps country closed and reopened in calendar year 2002: Madagascar

Table does not include Bosnia, where only Crisis Corps Volunteers were present

Incidence = events/100 V/T-Years

Table 10. In 2002, Numbers and Incidence of Reported Water-Related Injuries and "Other" Unintentional Injuries

	# Rpts	V/T-Years	Water Inj. No.	Water Inj. Incidence	"Other" Inj. No.	"Other" Inj. Incidence
AFRICA Region						
BENIN	12	115	.	.	10	8.7
BURKINA FASO	12	80	2	2.5	11	13.7
CAMEROON	12	130	.	.	11	8.5
CAPE VERDE	12	48	.	.	11	22.8
COTE D'IVOIRE**	10	117	.	.	19	16.3
GABON	12	56	.	.	.	.
GHANA	12	136	.	.	2	1.5
GUINEA	12	105	.	.	4	3.8
KENYA	12	132	.	.	5	3.8
LESOTHO	12	94	.	.	14	14.9
MADAGASCAR ***	7	44	.	.	7	16.0
MALAWI	12	120	.	.	5	4.2
MALI	12	140	.	.	21	15.0
MAURITANIA	12	73	.	.	7	9.6
MOZAMBIQUE	12	46	.	.	3	6.6
NAMIBIA	12	83	.	.	7	8.5
NIGER	12	102	.	.	12	11.7
SENEGAL	12	133	.	.	21	15.8
SOUTH AFRICA	12	82	.	.	4	4.9
TANZANIA	12	110	.	.	3	2.7
THE GAMBIA	12	89	.	.	1	1.1
TOGO	12	93	.	.	8	8.6
UGANDA	12	33	.	.	3	9.2
ZAMBIA	12	127	1	.8	1	.8
TOTAL AFRICA	281	2,286	3	.1	190	8.3
EMA Region						
ARMENIA	12	63	.	.	5	8.0
BANGLADESH *	5	5	.	.	.	.
BULGARIA	12	115	.	.	43	37.5
CHINA	12	86	.	.	17	19.7
ESTONIA **	7	10	.	.	1	10.5
GEORGIA	12	41	.	.	11	26.7
JORDAN **	11	56	1	1.8	7	12.4
KAZAKHSTAN	12	113	.	.	26	23.0
KYRGYZ REPUBL*	10	19	.	.	.	.
LATVIA **	7	13	.	.	.	.
LITHUANIA **	7	13	.	.	2	15.2
MACEDONIA *	2	3	.	.	1	37.3
MOLDOVA	12	94	.	.	45	47.8
MONGOLIA	12	78	.	.	14	18.0
MOROCCO	12	147	.	.	3	2.0
NEPAL	12	110	.	.	14	12.8
PHILIPPINES	12	135	.	.	8	5.9
ROMANIA	12	179	.	.	56	31.4
RUSSIA/FAR EAST	12	39	.	.	6	15.3
RUSSIA/WESTERN	12	70	.	.	5	7.2
SLOVAKIA **	7	22	.	.	2	9.2
THAILAND	12	60	.	.	1	1.7
TURKMENISTAN *	9	20	.	.	4	20.2
UKRAINE	12	183	.	.	27	14.8
UZBEKISTAN *	9	23	.	.	1	4.3
TOTAL EMA	254	1,695	1	<.1	299	17.6

	# Rpts	V/T-Years	Water Inj. No.	Water Inj. Incidence	"Other" Inj. No.	"Other" Inj. Incidence
IAP Region						
BELIZE	12	60	2	3.3	13	21.5
BOLIVIA	12	158	.	.	5	3.2
COSTA RICA	12	30	.	.	1	3.4
DOMINICAN REPUBL	12	138	1	.7	12	8.7
EAST TIMOR *	7	9	2	21.7	1	10.9
EASTERN CARIBBEA	12	76	.	.	14	18.5
ECUADOR	12	154	1	.6	32	20.7
EL SALVADOR	12	149	.	.	26	17.5
GUATEMALA	12	247	2	.8	76	30.8
GUYANA	12	43	.	.	8	18.6
HAITI	12	66	.	.	13	19.8
HONDURAS	12	248	.	.	38	15.3
JAMAICA	12	89	.	.	14	15.8
KIRIBATI	12	54	.	.	2	3.7
MICRONESIA	12	66	2	3.0	5	7.6
NICARAGUA	12	174	1	.6	15	8.6
PANAMA	12	110	.	.	17	15.4
PARAGUAY	12	204	.	.	23	11.3
PERU *	5	6	.	.	1	16.9
SAMOA	12	52	3	5.7	15	28.7
SURINAME	12	37	.	.	5	13.5
TONGA	12	71	.	.	13	18.2
VANUATU	12	54	3	5.6	17	31.7
TOTAL IAP	264	2,293	17	.7	366	16.0
ALL COUNTRIES	799	6,275	21	.3	855	13.6

* Peace Corps countries opened or reopened in calendar year 2002: Bangladesh, East Timor, Kyrgyz Republic, Macedonia, Peru, Turkmenistan, Uzbekistan

** Peace Corps countries closed or suspended in calendar year 2002: Cote d'Ivoire, Estonia, Jordan, Latvia, Lithuania, Slovakia

*** Peace Corps country closed and reopened in calendar year 2002: Madagascar

Table does not include Bosnia, where only Crisis Corps Volunteers were present

Incidence = events/100 V/T-Years

Table 11. In 2002, Numbers and Incidence of Reported Leishmaniasis and Confirmed Falciparum Malaria

	Malaria	V/T-	Leishmaniasis		Falcip.	
	# Rpts	Years	No.	Incidence	No.	Incidence
AFRICA Region						
BENIN	12	115	.	.	.	.
BURKINA FASO	12	80	.	.	2	2.5
CAMEROON	12	130	.	.	6	4.6
CAPE VERDE	12	48	.	.	.	.
COTE D'IVOIRE**	10	117	.	.	6	5.1
GABON	12	56	.	.	.	.
GHANA	12	136	.	.	7	5.1
GUINEA	12	105	.	.	15	14.3
KENYA	12	132	.	.	2	1.5
LESOTHO	12	94	.	.	.	.
MADAGASCAR ***	7	44	.	.	.	.
MALAWI	12	120	.	.	9	7.5
MALI	12	140	.	.	25	17.9
MAURITANIA	12	73	.	.	.	.
MOZAMBIQUE	12	46	1	2.2	2	4.4
NAMIBIA	12	83	.	.	.	.
NIGER	12	102	.	.	6	5.9
SENEGAL	12	133	.	.	4	3.0
SOUTH AFRICA	12	82	.	.	.	.
TANZANIA	12	110	.	.	.	.
THE GAMBIA	12	89	.	.	2	2.3
TOGO	12	93	.	.	1	1.1
UGANDA	12	33	.	.	.	.
ZAMBIA	12	127	.	.	5	3.9
TOTAL AFRICA	281	2286	1	<.1	92	4.0
EMA Region						
ARMENIA	12	63	.	.	.	.
BANGLADESH *	5	5	.	.	.	.
BULGARIA	12	115	.	.	.	.
CHINA	12	86	.	.	.	.
ESTONIA **	7	10	.	.	.	.
GEORGIA	12	41	.	.	.	.
JORDAN **	11	56	.	.	.	.
KAZAKHSTAN	12	113	.	.	.	.
KYRGYZ REPUBL*	10	19	.	.	.	.
LATVIA **	7	13	.	.	.	.
LITHUANIA **	7	13	.	.	.	.
MACEDONIA *	2	3	.	.	.	.
MOLDOVA	12	94	.	.	.	.
MONGOLIA	12	78	.	.	.	.
MOROCCO	12	147	.	.	.	.
NEPAL	12	110	.	.	.	.
PHILIPPINES	12	135	.	.	1	.7
ROMANIA	12	179	.	.	.	.
RUSSIA/FAR EAST	12	39	.	.	.	.
RUSSIA/WESTERN	12	70	.	.	.	.
SLOVAKIA **	7	22	.	.	.	.
THAILAND	12	60	.	.	.	.
TURKMENISTAN *	9	20	.	.	.	.
UKRAINE	12	183	.	.	.	.
UZBEKISTAN *	9	23	.	.	.	.
TOTAL EMA	254	1695	.	.	1	<.1

	# Rpts	V/T- Years	Leishmaniasis No.	Leishmaniasis Incidence	Falcip. No.	Falcip. Incidence	Malaria
IAP Region							
BELIZE	12	60	.	.	.	.	
BOLIVIA	12	158	.	.	.	.	
COSTA RICA	12	30	.	.	.	.	
DOMINICAN REPUBL	12	138	.	.	.	.	
EAST TIMOR *	7	9	.	.	.	.	
EASTERN CARIBBEA	12	76	.	.	.	.	
ECUADOR	12	154	.	.	.	.	
EL SALVADOR	12	149	.	.	.	.	
GUATEMALA	12	247	.	.	.	.	
GUYANA	12	43	.	.	.	.	
HAITI	12	66	.	.	3	4.6	
HONDURAS	12	248	.	.	.	.	
JAMAICA	12	89	.	.	.	.	
KIRIBATI	12	54	.	.	.	.	
MICRONESIA	12	66	.	.	.	.	
NICARAGUA	12	174	.	.	.	.	
PANAMA	12	110	1	.9	.	.	
PARAGUAY	12	204	.	.	.	.	
PERU *	5	6	.	.	.	.	
SAMOA	12	52	.	.	.	.	
SURINAME	12	37	.	.	.	.	
TONGA	12	71	.	.	.	.	
VANUATU	12	54	.	.	.	.	
TOTAL IAP	264	2293	1	<.1	3	.1	
ALL COUNTRIES	799	6275	2	<.1	96	1.5	

* Peace Corps countries opened or reopened in calendar year 2002: Bangladesh, East Timor, Kyrgyz Republic, Macedonia, Peru, Turkmenistan, Uzbekistan

** Peace Corps countries closed or suspended in calendar year 2002: Cote d'Ivoire, Estonia, Jordan, Latvia, Lithuania, Slovakia

*** Peace Corps country closed and reopened in calendar year 2002: Madagascar

Table does not include Bosnia, where only Crisis Corps Volunteers were present

Incidence = events/100 V/T-Years

Table 12. In 2002, Numbers and Incidence of Reported Confirmed Non-Falciparum Malaria and Presumptive Malaria

	# Rpts	V/T-Years	NonFal. Malaria No.	NonFal. Malaria Incidence	Pres. Malaria No.	Pres. Malaria Incidence
AFRICA Region						
BENIN	12	115	.	.	2	1.7
BURKINA FASO	12	80	.	.	2	2.5
CAMEROON	12	130	.	.	10	7.7
CAPE VERDE	12	48	.	.	.	.
COTE D'IVOIRE**	10	117	.	.	10	8.6
GABON	12	56	.	.	7	12.5
GHANA	12	136	.	.	6	4.4
GUINEA	12	105	.	.	17	16.2
KENYA	12	132	.	.	.	.
LESOTHO	12	94	.	.	3	3.2
MADAGASCAR ***	7	44	.	.	2	4.6
MALAWI	12	120	.	.	1	.8
MALI	12	140	2	1.4	22	15.7
MAURITANIA	12	73	.	.	1	1.4
MOZAMBIQUE	12	46	.	.	.	.
NAMIBIA	12	83	.	.	.	.
NIGER	12	102	.	.	3	2.9
SENEGAL	12	133	.	.	1	.8
SOUTH AFRICA	12	82	.	.	1	1.2
TANZANIA	12	110	.	.	8	7.2
THE GAMBIA	12	89	.	.	.	.
TOGO	12	93	.	.	.	.
UGANDA	12	33	.	.	.	.
ZAMBIA	12	127	2	1.6	3	2.4
TOTAL AFRICA	281	2,286	4	.2	99	4.3
EMA Region						
ARMENIA	12	63	.	.	.	.
BANGLADESH *	5	5	.	.	.	.
BULGARIA	12	115	.	.	.	.
CHINA	12	86	.	.	.	.
ESTONIA **	7	10	.	.	.	.
GEORGIA	12	41	.	.	.	.
JORDAN **	11	56	.	.	.	.
KAZAKHSTAN	12	113	.	.	.	.
KYRGYZ REPUBL*	10	19	.	.	.	.
LATVIA **	7	13	.	.	.	.
LITHUANIA **	7	13	.	.	.	.
MACEDONIA *	2	3	.	.	.	.
MOLDOVA	12	94	.	.	.	.
MONGOLIA	12	78	.	.	.	.
MOROCCO	12	147	.	.	.	.
NEPAL	12	110	.	.	.	.
PHILIPPINES	12	135	.	.	.	.
ROMANIA	12	179	.	.	.	.
RUSSIA/FAR EAST	12	39	.	.	.	.
RUSSIA/WESTERN	12	70	.	.	.	.
SLOVAKIA **	7	22	.	.	.	.
THAILAND	12	60	.	.	.	.
TURKMENISTAN *	9	20	.	.	.	.
UKRAINE	12	183	.	.	.	.
UZBEKISTAN *	9	23	.	.	.	.
TOTAL EMA	254	1,695	.	.	.	.

	# Rpts	V/T-Years	NonFal. Malaria No.	NonFal. Malaria Incidence	Pres. Malaria No.	Pres. Malaria Incidence
IAP Region						
BELIZE	12	60	.	.	.	.
BOLIVIA	12	158	.	.	.	.
COSTA RICA	12	30	.	.	.	.
DOMINICAN REPUBL	12	138	.	.	.	.
EAST TIMOR *	7	9	.	.	.	.
EASTERN CARIBBEA	12	76	.	.	.	.
ECUADOR	12	154	.	.	.	.
EL SALVADOR	12	149	.	.	.	.
GUATEMALA	12	247	.	.	.	.
GUYANA	12	43	.	.	.	.
HAITI	12	66	.	.	8	12.2
HONDURAS	12	248	1	.4	.	.
JAMAICA	12	89	.	.	.	.
KIRIBATI	12	54	.	.	.	.
MICRONESIA	12	66	.	.	.	.
NICARAGUA	12	174	.	.	.	.
PANAMA	12	110	.	.	.	.
PARAGUAY	12	204	.	.	.	.
PERU *	5	6	.	.	.	.
SAMOA	12	52	.	.	.	.
SURINAME	12	37	.	.	.	.
TONGA	12	71	.	.	.	.
VANUATU	12	54	1	1.9	.	.
TOTAL IAP	264	2,293	2	<.1	8	.3
ALL COUNTRIES	799	6,275	6	.1	107	1.7

* Peace Corps countries opened or reopened in calendar year 2002: Bangladesh, East Timor, Kyrgyz Republic, Macedonia, Peru, Turkmenistan, Uzbekistan

** Peace Corps countries closed or suspended in calendar year 2002: Cote d'Ivoire, Estonia, Jordan, Latvia, Lithuania, Slovakia

*** Peace Corps country closed and reopened in calendar year 2002: Madagascar

Table does not include Bosnia, where only Crisis Corps Volunteers were present

Incidence = events/100 V/T-Years

Table 13. In 2002, Numbers and Incidence of Office of Medical Services (OMS)[1] Medevacs and Regional[2] Medevacs

	# Rpts	V/T-Years	OMS Medevacs No.	OMS Medevacs Incidence	Reg. Medevacs No.	Reg. Medevacs Incidence
AFRICA Region						
BENIN	12	115	12	10.4	2	1.7
BURKINA FASO	12	80	14	17.4	8	10.0
CAMEROON	12	130	15	11.6	.	.
CAPE VERDE	12	48	6	12.5	4	8.3
COTE D'IVOIRE**	10	117	5	4.3	.	.
GABON	12	56	6	10.7	.	.
GHANA	12	136	15	11.0	2	1.5
GUINEA	12	105	5	4.8	3	2.9
KENYA	12	132	13	9.9	1	.8
LESOTHO	12	94	8	8.5	2	2.1
MADAGASCAR ***	7	44	.	.	3	6.9
MALAWI	12	120	7	5.9	6	5.0
MALI	12	140	19	13.6	6	4.3
MAURITANIA	12	73	2	2.8	2	2.8
MOZAMBIQUE	12	46	5	11.0	10	22.0
NAMIBIA	12	83	6	7.3	3	3.6
NIGER	12	102	10	9.8	5	4.9
SENEGAL	12	133	17	12.8	.	.
SOUTH AFRICA	12	82	2	2.4	.	.
TANZANIA	12	110	7	6.3	6	5.4
THE GAMBIA	12	89	5	5.6	3	3.4
TOGO	12	93	10	10.8	3	3.2
UGANDA	12	33	4	12.2	2	6.1
ZAMBIA	12	127	5	3.9	6	4.7
TOTAL AFRICA	281	2,286	198	8.7	77	3.4
EMA Region						
ARMENIA	12	63	4	6.4	.	.
BANGLADESH *	5	5	1	19.6	.	.
BULGARIA	12	115	11	9.6	.	.
CHINA	12	86	7	8.1	10	11.6
ESTONIA **	7	10	3	31.5	.	.
GEORGIA	12	41	1	2.4	.	.
JORDAN **	11	56	10	17.7	.	.
KAZAKHSTAN	12	113	21	18.6	.	.
KYRGYZ REPUBL*	10	19	.	.	.	.
LATVIA **	7	13	2	15.1	.	.
LITHUANIA **	7	13	1	7.6	.	.
MACEDONIA *	2	3	.	.	.	.
MOLDOVA	12	94	5	5.3	.	.
MONGOLIA	12	78	3	3.9	2	2.6
MOROCCO	12	147	10	6.8	.	.
NEPAL	12	110	10	9.1	3	2.7
PHILIPPINES	12	135	11	8.2	.	.
ROMANIA	12	179	14	7.8	.	.
RUSSIA/FAR EAST	12	39	3	7.7	2	5.1
RUSSIA/WESTERN	12	70	3	4.3	.	.
SLOVAKIA **	7	22	1	4.6	.	.
THAILAND	12	60	1	1.7	.	.
TURKMENISTAN *	9	20	.	.	.	.
UKRAINE	12	183	26	14.2	.	.
UZBEKISTAN *	9	23	1	4.3	.	.
TOTAL EMA	254	1,695	149	8.8	17	1.0

	# Rpts	V/T-Years	OMS Medevacs No.	OMS Medevacs Incidence	Reg. Medevacs No.	Reg. Medevacs Incidence
IAP Region						
BELIZE	12	60	11	18.2	.	.
BOLIVIA	12	158	11	7.0	.	.
COSTA RICA	12	30	3	10.1	.	.
DOMINICAN REPUBL	12	138	15	10.9	.	.
EAST TIMOR *	7	9	5	54.3	4	43.4
EASTERN CARIBBEA	12	76	10	13.2	.	.
ECUADOR	12	154	11	7.1	1	.6
EL SALVADOR	12	149	16	10.8	.	.
GUATEMALA	12	247	11	4.5	.	.
GUYANA	12	43	7	16.3	.	.
HAITI	12	66	7	10.6	.	.
HONDURAS	12	248	23	9.3	.	.
JAMAICA	12	89	7	7.9	.	.
KIRIBATI	12	54	2	3.7	3	5.6
MICRONESIA	12	66	11	16.7	2	3.0
NICARAGUA	12	174	14	8.0	.	.
PANAMA	12	110	9	8.2	.	.
PARAGUAY	12	204	7	3.4	.	.
PERU *	5	6	1	16.9	.	.
SAMOA	12	52	9	17.2	.	.
SURINAME	12	37	2	5.4	.	.
TONGA	12	71	5	7.0	.	.
VANUATU	12	54	1	1.9	3	5.6
TOTAL IAP	264	2,293	198	8.6	13	.6
ALL COUNTRIES	799	6,275	545	8.7	107	1.7

[1] Data are from the Peace Corps Medevac Case Management System. The majority of OMS-authorized medevacs are to the United States; however, on occasion, PCVs may be medevaced to another country, such as Germany, for immediate care

[2] Regional medevacs involve the evacuation of PCVs from their host country to an approved regional medevac point, other than the United States, that does not require prior authorization from OMS

* Peace Corps countries opened or reopened in calendar year 2002: Bangladesh, East Timor, Kyrgyz Republic, Macedonia, Peru, Turkmenistan, Uzbekistan

** Peace Corps countries closed or suspended in calendar year 2002: Cote d'Ivoire, Estonia, Jordan, Latvia, Lithuania, Slovakia

*** Peace Corps country closed and reopened in calendar year 2002: Madagascar

Table does not include Bosnia, where only Crisis Corps Volunteers were present

Incidence = events/100 V/T-Years

Table 14. In 2002, Numbers and Incidence of Reported Mental Health Problems and Asthma

	# Rpts	V/T-Years	Mental Health No.	Mental Health Incidence	Asthma No.	Asthma Incidence
AFRICA Region						
BENIN	12	115	41	35.5	4	3.5
BURKINA FASO	12	80	17	21.2	14	17.4
CAMEROON	12	130	10	7.7	.	.
CAPE VERDE	12	48	43	89.2	.	.
COTE D'IVOIRE**	10	117	10	8.6	1	.9
GABON	12	56	4	7.2	.	.
GHANA	12	136	6	4.4	.	.
GUINEA	12	105	37	35.2	2	1.9
KENYA	12	132	8	6.1	1	.8
LESOTHO	12	94	59	62.9	1	1.1
MADAGASCAR ***	7	44	9	20.6	1	2.3
MALAWI	12	120	6	5.0	1	.8
MALI	12	140	33	23.6	.	.
MAURITANIA	12	73	19	26.1	.	.
MOZAMBIQUE	12	46	2	4.4	1	2.2
NAMIBIA	12	83	11	13.3	.	.
NIGER	12	102	7	6.8	.	.
SENEGAL	12	133	113	85.1	5	3.8
SOUTH AFRICA	12	82	19	23.1	8	9.7
TANZANIA	12	110	17	15.4	2	1.8
THE GAMBIA	12	89	41	46.1	.	.
TOGO	12	93	19	20.4	2	2.2
UGANDA	12	33	10	30.6	.	.
ZAMBIA	12	127	5	3.9	1	.8
TOTAL AFRICA	281	2,286	546	23.9	44	1.9
EMA Region						
ARMENIA	12	63	.	.	.	.
BANGLADESH *	5	5	2	39.3	.	.
BULGARIA	12	115	52	45.4	2	1.7
CHINA	12	86	69	80.2	5	5.8
ESTONIA **	7	10	.	.	2	21.0
GEORGIA	12	41	24	58.4	3	7.3
JORDAN **	11	56	35	62.0	.	.
KAZAKHSTAN	12	113	59	52.1	1	.9
KYRGYZ REPUBL*	10	19	3	15.5	.	.
LATVIA **	7	13	21	159	.	.
LITHUANIA **	7	13	16	121	.	.
MACEDONIA *	2	3	.	.	.	.
MOLDOVA	12	94	16	17.0	2	2.1
MONGOLIA	12	78	50	64.4	1	1.3
MOROCCO	12	147	44	29.9	3	2.0
NEPAL	12	110	82	74.9	1	.9
PHILIPPINES	12	135	22	16.3	3	2.2
ROMANIA	12	179	31	17.4	1	.6
RUSSIA/FAR EAST	12	39	31	79.2	2	5.1
RUSSIA/WESTERN	12	70	12	17.2	.	.
SLOVAKIA **	7	22	5	22.9	.	.
THAILAND	12	60	5	8.4	4	6.7
TURKMENISTAN *	9	20	29	146	.	.
UKRAINE	12	183	41	22.4	7	3.8
UZBEKISTAN *	9	23	4	17.3	.	.
TOTAL EMA	254	1,695	653	38.5	37	2.2

	# Rpts	V/T-Years	Mental Health No.	Mental Health Incidence	Asthma No.	Asthma Incidence
IAP Region						
BELIZE	12	60	13	21.5	.	.
BOLIVIA	12	158	32	20.3	.	.
COSTA RICA	12	30	9	30.3	2	6.7
DOMINICAN REPUBL	12	138	21	15.3	8	5.8
EAST TIMOR *	7	9	16	174	.	.
EASTERN CARIBBEA	12	76	79	104	1	1.3
ECUADOR	12	154	80	51.9	7	4.5
EL SALVADOR	12	149	55	37.0	.	.
GUATEMALA	12	247	54	21.9	15	6.1
GUYANA	12	43	4	9.3	1	2.3
HAITI	12	66	12	18.2	1	1.5
HONDURAS	12	248	34	13.7	4	1.6
JAMAICA	12	89	22	24.8	7	7.9
KIRIBATI	12	54	1	1.9	1	1.9
MICRONESIA	12	66	7	10.7	.	.
NICARAGUA	12	174	6	3.4	.	.
PANAMA	12	110	7	6.4	4	3.6
PARAGUAY	12	204	45	22.0	11	5.4
PERU *	5	6	1	16.9	.	.
SAMOA	12	52	13	24.9	.	.
SURINAME	12	37	.	.	.	.
TONGA	12	71	1	1.4	.	.
VANUATU	12	54	30	55.9	.	.
TOTAL IAP	264	2,293	542	23.6	62	2.7
ALL COUNTRIES	799	6,275	1,741	27.7	143	2.3

* Peace Corps countries opened or reopened in calendar year 2002: Bangladesh, East Timor, Kyrgyz Republic, Macedonia, Peru, Turkmenistan, Uzbekistan

** Peace Corps countries closed or suspended in calendar year 2002: Cote d'Ivoire, Estonia, Jordan, Latvia, Lithuania, Slovakia

*** Peace Corps country closed and reopened in calendar year 2002: Madagascar

Table does not include Bosnia, where only Crisis Corps Volunteers were present

Incidence = events/100 V/T-Years

Table 15. In 2002, Numbers and Incidence of Reported Lower (LRI) and Upper Respiratory Illnesses (URI)

	# Rpts	V/T-Years	LRI No.	LRI Incidence	URI No.	URI Incidence
AFRICA Region						
BENIN	12	115	12	10.4	33	28.6
BURKINA FASO	12	80	11	13.7	39	48.6
CAMEROON	12	130	4	3.1	29	22.4
CAPE VERDE	12	48	.	.	33	68.5
COTE D'IVOIRE**	10	117	3	2.6	73	62.5
GABON	12	56	2	3.6	4	7.2
GHANA	12	136	1	.7	12	8.8
GUINEA	12	105	1	1.0	63	59.9
KENYA	12	132	2	1.5	11	8.4
LESOTHO	12	94	8	8.5	39	41.6
MADAGASCAR ***	7	44	.	.	22	50.3
MALAWI	12	120	9	7.5	46	38.5
MALI	12	140	11	7.9	59	42.2
MAURITANIA	12	73	.	.	31	42.6
MOZAMBIQUE	12	46	3	6.6	14	30.7
NAMIBIA	12	83	2	2.4	24	29.0
NIGER	12	102	1	1.0	66	64.6
SENEGAL	12	133	9	6.8	131	98.7
SOUTH AFRICA	12	82	1	1.2	20	24.3
TANZANIA	12	110	10	9.1	32	29.0
THE GAMBIA	12	89	3	3.4	26	29.3
TOGO	12	93	.	.	11	11.8
UGANDA	12	33	5	15.3	11	33.6
ZAMBIA	12	127	.	.	30	23.6
TOTAL AFRICA	281	2,286	98	4.3	859	37.6
EMA Region						
ARMENIA	12	63	.	.	90	144
BANGLADESH *	5	5	.	.	5	98.2
BULGARIA	12	115	10	8.7	54	47.1
CHINA	12	86	16	18.6	62	72.0
ESTONIA **	7	10	.	.	9	94.5
GEORGIA	12	41	2	4.9	59	143
JORDAN **	11	56	5	8.9	30	53.2
KAZAKHSTAN	12	113	8	7.1	80	70.7
KYRGYZ REPUBL*	10	19	6	30.9	21	108
LATVIA **	7	13	.	.	8	60.4
LITHUANIA **	7	13	.	.	15	114
MACEDONIA *	2	3	.	.	6	224
MOLDOVA	12	94	20	21.3	134	142
MONGOLIA	12	78	.	.	60	77.2
MOROCCO	12	147	3	2.0	53	36.0
NEPAL	12	110	8	7.3	73	66.6
PHILIPPINES	12	135	4	3.0	33	24.5
ROMANIA	12	179	22	12.3	105	58.8
RUSSIA/FAR EAST	12	39	1	2.6	25	63.9
RUSSIA/WESTERN	12	70	3	4.3	29	41.5
SLOVAKIA **	7	22	6	27.5	15	68.8
THAILAND	12	60	3	5.0	26	43.7
TURKMENISTAN*	9	20	5	25.2	26	131
UKRAINE	12	183	19	10.4	72	39.4
UZBEKISTAN *	9	23	.	.	11	47.5
TOTAL EMA	254	1,695	141	8.3	1,101	65.0

	# Rpts	V/T-Years	LRI No.	LRI Incidence	URI No.	URI Incidence
IAP Region						
BELIZE	12	60	7	11.6	39	64.6
BOLIVIA	12	158	2	1.3	170	108
COSTA RICA	12	30	3	10.1	32	108
DOMINICAN REPUBL	12	138	10	7.3	78	56.7
EAST TIMOR *	7	9	.	.	7	76.0
EASTERN CARIBBEA	12	76	5	6.6	49	64.7
ECUADOR	12	154	8	5.2	70	45.4
EL SALVADOR	12	149	16	10.8	102	68.7
GUATEMALA	12	247	81	32.9	162	65.7
GUYANA	12	43	4	9.3	9	20.9
HAITI	12	66	.	.	31	47.1
HONDURAS	12	248	13	5.2	87	35.1
JAMAICA	12	89	12	13.5	42	47.4
KIRIBATI	12	54	5	9.3	35	65.2
MICRONESIA	12	66	.	.	36	54.8
NICARAGUA	12	174	11	6.3	71	40.7
PANAMA	12	110	7	6.4	40	36.3
PARAGUAY	12	204	30	14.7	51	25.0
PERU *	5	6	.	.	.	.
SAMOA	12	52	17	32.6	68	130
SURINAME	12	37	10	26.9	44	118
TONGA	12	71	4	5.6	28	39.3
VANUATU	12	54	.	.	39	72.6
TOTAL IAP	264	2,293	245	10.7	1,290	56.3
ALL COUNTRIES	799	6,275	484	7.7	3,250	51.8

* Peace Corps countries opened or reopened in calendar year 2002: Bangladesh, East Timor, Kyrgyz Republic, Macedonia, Peru, Turkmenistan, Uzbekistan

** Peace Corps countries closed or suspended in calendar year 2002: Cote d'Ivoire, Estonia, Jordan, Latvia, Lithuania, Slovakia

*** Peace Corps country closed and reopened in calendar year 2002: Madagascar

Table does not include Bosnia, where only Crisis Corps Volunteers were present

Incidence = events/100 V/T-Years

Table 16. In 2002, Numbers and Incidence of Reported Pregnancy and Non-STD ("Other") Gynecological Infections

	Inf.	Female V/T-Years		Pregnancy		"Other" Gyn. Inf	
		# Rpts	Years	No.	Incidence	No.	Incidence
AFRICA Region							
BENIN		12	80	1	1.3	23	28.9
BURKINA FASO		12	58	.	.	23	39.9
CAMEROON		12	77	.	.	5	6.5
CAPE VERDE		12	32	.	.	8	25.0
COTE D'IVOIRE	**	10	77	1	1.3	17	22.0
GABON		12	40	2	5.0	5	12.5
GHANA		12	86	.	.	7	8.2
GUINEA		12	68	.	.	17	24.9
KENYA		12	80	2	2.5	.	.
LESOTHO		12	55	1	1.8	15	27.0
MADAGASCAR	***	7	30	.	.	8	26.6
MALAWI		12	78	1	1.3	3	3.8
MALI		12	81	2	2.5	5	6.2
MAURITANIA		12	42	.	.	5	11.9
MOZAMBIQUE		12	23	.	.	.	.
NAMIBIA		12	55	.	.	5	9.1
NIGER		12	66	.	.	10	15.1
SENEGAL		12	93	2	2.2	30	32.3
SOUTH AFRICA		12	63	.	.	1	1.6
TANZANIA		12	57	.	.	5	8.7
THE GAMBIA		12	62	.	.	.	.
TOGO		12	75	.	.	1	1.3
UGANDA		12	16	1	6.1	1	6.1
ZAMBIA		12	80	1	1.3	.	.
TOTAL AFRICA		281	1,474	14	.9	194	13.2
EMA Region							
ARMENIA		12	34	1	2.9	2	5.8
BANGLADESH	*	5	3	.	.	.	.
BULGARIA		12	62	.	.	26	42.0
CHINA		12	47	.	.	17	36.5
ESTONIA	**	7	6	.	.	.	.
GEORGIA		12	21	.	.	3	14.3
JORDAN	**	11	48	.	.	14	29.2
KAZAKHSTAN		12	53	.	.	11	20.6
KYRGYZ REPUBL	*	10	8	.	.	2	24.1
LATVIA	**	7	9	.	.	.	.
LITHUANIA	**	7	8	.	.	.	.
MACEDONIA	*	2	1	.	.	.	.
MOLDOVA		12	54	.	.	9	16.7
MONGOLIA		12	37	.	.	16	43.0
MOROCCO		12	90	1	1.1	14	15.5
NEPAL		12	71	1	1.4	14	19.7
PHILIPPINES		12	76	1	1.3	11	14.5
ROMANIA		12	102	.	.	34	33.2
RUSSIA/FAR EAST		12	21	.	.	4	18.7
RUSSIA/WESTERN		12	33	1	3.0	1	3.0
SLOVAKIA	**	7	10	1	10.0	4	40.1
THAILAND		12	37	.	.	4	10.7
TURKMENISTAN	*	9	13	1	7.9	.	.
UKRAINE		12	93	.	.	18	19.3
UZBEKISTAN	*	9	15	1	6.9	.	.
TOTAL EMA		254	954	8	.8	204	21.4

	Female V/T-Years		Pregnancy		"Other" Gyn. Inf	
	# Rpts	Years	No.	Incidence	No.	Incidence
IAP Region						
BELIZE	12	33	.	.	17	51.6
BOLIVIA	12	92	1	1.1	38	41.1
COSTA RICA	12	26	2	7.6	20	75.7
DOMINICAN REPUBL	12	87	3	3.5	29	33.5
EAST TIMOR *	7	3	.	.	1	29.1
EASTERN CARIBBEA	12	50	.	.	73	147
ECUADOR	12	95	2	2.1	39	40.9
EL SALVADOR	12	89	1	1.1	25	28.0
GUATEMALA	12	149	1	.7	43	28.9
GUYANA	12	28	.	.	1	3.5
HAITI	12	39	1	2.5	6	15.2
HONDURAS	12	139	5	3.6	18	12.9
JAMAICA	12	46	.	.	25	53.9
KIRIBATI	12	35	3	8.6	.	.
MICRONESIA	12	33	.	.	.	.
NICARAGUA	12	115	1	.9	18	15.6
PANAMA	12	65	.	.	10	15.4
PARAGUAY	12	131	3	2.3	32	24.3
PERU *	5	4	.	.	.	.
SAMOA	12	33	1	3.0	20	60.6
SURINAME	12	19	2	10.8	19	102
TONGA	12	38	.	.	5	13.0
VANUATU	12	25	.	.	8	31.7
TOTAL IAP	264	1,378	26	1.9	447	32.4
ALL COUNTRIES	799	3,806	48	1.3	845	22.2

* Peace Corps countries opened or reopened in calendar year 2002: Bangladesh, East Timor, Kyrgyz Republic, Macedonia, Peru, Turkmenistan, Uzbekistan

** Peace Corps countries closed or suspended in calendar year 2002: Cote d'Ivoire, Estonia, Jordan, Latvia, Lithuania, Slovakia

*** Peace Corps country closed and reopened in calendar year 2002: Madagascar

Table does not include Bosnia, where only Crisis Corps Volunteers were present

Incidence = events/100 Female V/T-Years

Table 17. In 2002, Numbers and Incidence of Reported Genital Ulcers and Genital Warts

	# Rpts	V/T-Years	Genital Ulcers No.	Genital Ulcers Incidence	Genital Warts No.	Genital Warts Incidence
AFRICA Region						
BENIN	12	115	.	.	.	.
BURKINA FASO	12	80	.	.	.	.
CAMEROON	12	130	.	.	3	2.3
CAPE VERDE	12	48	.	.	.	.
COTE D'IVOIRE**	10	117	.	.	.	.
GABON	12	56	.	.	1	1.8
GHANA	12	136	.	.	.	.
GUINEA	12	105	.	.	.	.
KENYA	12	132	.	.	2	1.5
LESOTHO	12	94	.	.	.	.
MADAGASCAR ***	7	44	1	2.3	.	.
MALAWI	12	120	.	.	.	.
MALI	12	140	.	.	1	.7
MAURITANIA	12	73	.	.	.	.
MOZAMBIQUE	12	46	.	.	.	.
NAMIBIA	12	83	1	1.2	1	1.2
NIGER	12	102	1	1.0	.	.
SENEGAL	12	133	.	.	.	.
SOUTH AFRICA	12	82	2	2.4	.	.
TANZANIA	12	110	2	1.8	.	.
THE GAMBIA	12	89	.	.	.	.
TOGO	12	93	.	.	.	.
UGANDA	12	33	.	.	.	.
ZAMBIA	12	127	1	.8	1	.8
TOTAL AFRICA	281	2,286	8	.3	9	.4
EMA Region						
ARMENIA	12	63	.	.	.	.
BANGLADESH *	5	5	.	.	.	.
BULGARIA	12	115	.	.	.	.
CHINA	12	86	2	2.3	.	.
ESTONIA **	7	10	.	.	.	.
GEORGIA	12	41	.	.	.	.
JORDAN **	11	56	2	3.5	.	.
KAZAKHSTAN	12	113	2	1.8	.	.
KYRGYZ REPUBL*	10	19	.	.	.	.
LATVIA **	7	13	.	.	.	.
LITHUANIA **	7	13	.	.	.	.
MACEDONIA *	2	3	.	.	.	.
MOLDOVA	12	94	2	2.1	.	.
MONGOLIA	12	78	.	.	2	2.6
MOROCCO	12	147	2	1.4	.	.
NEPAL	12	110	1	.9	.	.
PHILIPPINES	12	135	.	.	2	1.5
ROMANIA	12	179	.	.	3	1.7
RUSSIA/FAR EAST	12	39	1	2.6	1	2.6
RUSSIA/WESTERN	12	70	1	1.4	.	.
SLOVAKIA **	7	22	.	.	.	.
THAILAND	12	60	.	.	.	.
TURKMENISTAN *	9	20	.	.	.	.
UKRAINE	12	183	1	.5	1	.5
UZBEKISTAN *	9	23	.	.	.	.
TOTAL EMA	254	1,695	14	.8	9	.5

IAP Region	# Rpts	V/T-Years	Genital Ulcers No.	Genital Ulcers Incidence	Genital Warts No.	Genital Warts Incidence
BELIZE	12	60	2	3.3	1	1.7
BOLIVIA	12	158	.	.	.	.
COSTA RICA	12	30	.	.	.	.
DOMINICAN REPUBL	12	138	.	.	1	.7
EAST TIMOR *	7	9	.	.	.	.
EASTERN CARIBBEA	12	76	.	.	.	.
ECUADOR	12	154	1	.6	1	.6
EL SALVADOR	12	149	3	2.0	.	.
GUATEMALA	12	247	1	.4	9	3.7
GUYANA	12	43	2	4.6	.	.
HAITI	12	66	3	4.6	3	4.6
HONDURAS	12	248	.	.	2	.8
JAMAICA	12	89	.	.	.	.
KIRIBATI	12	54	.	.	.	.
MICRONESIA	12	66	.	.	.	.
NICARAGUA	12	174	1	.6	2	1.1
PANAMA	12	110	.	.	3	2.7
PARAGUAY	12	204	2	1.0	1	.5
PERU *	5	6	.	.	1	16.9
SAMOA	12	52	.	.	.	.
SURINAME	12	37	.	.	.	.
TONGA	12	71	.	.	.	.
VANUATU	12	54	.	.	2	3.7
TOTAL IAP	264	2,293	15	.7	26	1.1
ALL COUNTRIES	799	6,275	37	.6	44	.7

* Peace Corps countries opened or reopened in calendar year 2002: Bangladesh, East Timor, Kyrgyz Republic, Macedonia, Peru, Turkmenistan, Uzbekistan

** Peace Corps countries closed or suspended in calendar year 2002: Cote d'Ivoire, Estonia, Jordan, Latvia, Lithuania, Slovakia

*** Peace Corps country closed and reopened in calendar year 2002: Madagascar

Table does not include Bosnia, where only Crisis Corps Volunteers were present

Incidence = events/100 V/T-Years

Table 18. In 2002, Numbers and Incidence of Reported "Other" Sexually Transmitted Diseases (STDs) and Schistosomiasis

	# Rpts	V/T-Years	"Other" STDs No.	"Other" STDs Incidence	Schistosomiasis No.	Schistosomiasis Incidence
AFRICA Region						
BENIN	12	115	3	2.6	.	.
BURKINA FASO	12	80	.	.	1	1.2
CAMEROON	12	130	1	.8	1	.8
CAPE VERDE	12	48	1	2.1	.	.
COTE D'IVOIRE**	10	117	.	.	.	.
GABON	12	56	1	1.8	.	.
GHANA	12	136	3	2.2	7	5.1
GUINEA	12	105	1	1.0	1	1.0
KENYA	12	132	.	.	.	.
LESOTHO	12	94	1	1.1	.	.
MADAGASCAR ***	7	44	1	2.3	.	.
MALAWI	12	120	5	4.2	17	14.2
MALI	12	140	.	.	.	.
MAURITANIA	12	73	.	.	1	1.4
MOZAMBIQUE	12	46	.	.	1	2.2
NAMIBIA	12	83	.	.	.	.
NIGER	12	102	.	.	.	.
SENEGAL	12	133	.	.	2	1.5
SOUTH AFRICA	12	82	.	.	.	.
TANZANIA	12	110	.	.	4	3.6
THE GAMBIA	12	89	1	1.1	.	.
TOGO	12	93	2	2.2	1	1.1
UGANDA	12	33	.	.	2	6.1
ZAMBIA	12	127	.	.	.	.
TOTAL AFRICA	281	2,286	20	.9	38	1.7
EMA Region						
ARMENIA	12	63	.	.	.	.
BANGLADESH *	5	5	.	.	.	.
BULGARIA	12	115	2	1.7	.	.
CHINA	12	86	1	1.2	.	.
ESTONIA **	7	10	.	.	.	.
GEORGIA	12	41	2	4.9	.	.
JORDAN **	11	56	1	1.8	.	.
KAZAKHSTAN	12	113	3	2.7	.	.
KYRGYZ REPUBL*	10	19	.	.	.	.
LATVIA **	7	13	1	7.6	.	.
LITHUANIA **	7	13	.	.	.	.
MACEDONIA *	2	3	.	.	.	.
MOLDOVA	12	94	3	3.2	.	.
MONGOLIA	12	78	.	.	.	.
MOROCCO	12	147	4	2.7	.	.
NEPAL	12	110	1	.9	.	.
PHILIPPINES	12	135	2	1.5	.	.
ROMANIA	12	179	1	.6	.	.
RUSSIA/FAR EAST	12	39	6	15.3	.	.
RUSSIA/WESTERN	12	70	4	5.7	.	.
SLOVAKIA **	7	22	.	.	.	.
THAILAND	12	60	2	3.4	.	.
TURKMENISTAN *	9	20	.	.	.	.
UKRAINE	12	183	2	1.1	.	.
UZBEKISTAN *	9	23	.	.	.	.
TOTAL EMA	254	1,695	35	2.1	.	.

	# Rpts	V/T-Years	"Other" STDs No.	"Other" STDs Incidence	Schistosomiasis No.	Schistosomiasis Incidence
IAP Region						
BELIZE	12	60	1	1.7	.	.
BOLIVIA	12	158	1	.6	.	.
COSTA RICA	12	30	.	.	.	.
DOMINICAN REPUBL	12	138	5	3.6	.	.
EAST TIMOR *	7	9	1	10.9	.	.
EASTERN CARIBBEA	12	76	.	.	.	.
ECUADOR	12	154	3	1.9	.	.
EL SALVADOR	12	149	3	2.0	.	.
GUATEMALA	12	247	3	1.2	.	.
GUYANA	12	43	1	2.3	.	.
HAITI	12	66	2	3.0	.	.
HONDURAS	12	248	5	2.0	.	.
JAMAICA	12	89	1	1.1	.	.
KIRIBATI	12	54	.	.	.	.
MICRONESIA	12	66	2	3.0	.	.
NICARAGUA	12	174	1	.6	.	.
PANAMA	12	110	1	.9	.	.
PARAGUAY	12	204	12	5.9	.	.
PERU *	5	6	.	.	.	.
SAMOA	12	52	2	3.8	.	.
SURINAME	12	37	.	.	.	.
TONGA	12	71	.	.	.	.
VANUATU	12	54	.	.	.	.
TOTAL IAP	264	2,293	44	1.9	.	.
ALL COUNTRIES	799	6,275	99	1.6	38	.6

* Peace Corps countries opened or reopened in calendar year 2002: Bangladesh, East Timor, Kyrgyz Republic, Macedonia, Peru, Turkmenistan, Uzbekistan

** Peace Corps countries closed or suspended in calendar year 2002: Cote d'Ivoire, Estonia, Jordan, Latvia, Lithuania, Slovakia

*** Peace Corps country closed and reopened in calendar year 2002: Madagascar

Table does not include Bosnia, where only Crisis Corps Volunteers were present

Incidence = events/100 V/T-Years

Table 19. In 2002, Numbers and Incidence of Reported Tuberculosis PPD Conversion and Active Tuberculosis (TB)

	# Rpts	V/T-Years	PPD+ No.	PPD+ Incidence	Active TB No.	Active TB Incidence
AFRICA Region						
BENIN	12	115	.	.	.	.
BURKINA FASO	12	80	3	3.7	.	.
CAMEROON	12	130	10	7.7	.	.
CAPE VERDE	12	48	.	.	.	.
COTE D'IVOIRE**	10	117	14	12.0	.	.
GABON	12	56	.	.	.	.
GHANA	12	136	.	.	.	.
GUINEA	12	105	1	1.0	.	.
KENYA	12	132	3	2.3	.	.
LESOTHO	12	94	.	.	.	.
MADAGASCAR ***	7	44	.	.	.	.
MALAWI	12	120	1	.8	.	.
MALI	12	140	2	1.4	.	.
MAURITANIA	12	73	.	.	.	.
MOZAMBIQUE	12	46	1	2.2	.	.
NAMIBIA	12	83	2	2.4	.	.
NIGER	12	102	.	.	.	.
SENEGAL	12	133	1	.8	.	.
SOUTH AFRICA	12	82	.	.	.	.
TANZANIA	12	110	2	1.8	.	.
THE GAMBIA	12	89	1	1.1	.	.
TOGO	12	93	1	1.1	.	.
UGANDA	12	33	.	.	.	.
ZAMBIA	12	127	.	.	.	.
TOTAL AFRICA	281	2,286	42	1.8	.	.
EMA Region						
ARMENIA	12	63	1	1.6	.	.
BANGLADESH *	5	5	.	.	.	.
BULGARIA	12	115	1	.9	.	.
CHINA	12	86	3	3.5	.	.
ESTONIA **	7	10	2	21.0	.	.
GEORGIA	12	41	.	.	.	.
JORDAN **	11	56	.	.	.	.
KAZAKHSTAN	12	113	6	5.3	.	.
KYRGYZ REPUBL*	10	19	.	.	.	.
LATVIA **	7	13	.	.	.	.
LITHUANIA **	7	13	1	7.6	.	.
MACEDONIA *	2	3	.	.	.	.
MOLDOVA	12	94	.	.	.	.
MONGOLIA	12	78	.	.	.	.
MOROCCO	12	147	.	.	.	.
NEPAL	12	110	1	.9	.	.
PHILIPPINES	12	135	.	.	.	.
ROMANIA	12	179	1	.6	.	.
RUSSIA/FAR EAST	12	39	1	2.6	.	.
RUSSIA/WESTERN	12	70	1	1.4	.	.
SLOVAKIA **	7	22	2	9.2	.	.
THAILAND	12	60	.	.	.	.
TURKMENISTAN *	9	20	.	.	.	.
UKRAINE	12	183	4	2.2	.	.
UZBEKISTAN *	9	23	1	4.3	.	.
TOTAL EMA	254	1,695	25	1.5	.	.

IAP Region	# Rpts	V/T-Years	PPD+ No.	PPD+ Incidence	Active TB No.	Active TB Incidence
BELIZE	12	60	.	.	.	.
BOLIVIA	12	158	.	.	.	.
COSTA RICA	12	30	.	.	.	.
DOMINICAN REPUBL	12	138	3	2.2	.	.
EAST TIMOR *	7	9	.	.	.	.
EASTERN CARIBBEA	12	76	1	1.3	.	.
ECUADOR	12	154	1	.6	.	.
EL SALVADOR	12	149	3	2.0	.	.
GUATEMALA	12	247	2	.8	.	.
GUYANA	12	43	.	.	.	.
HAITI	12	66	.	.	.	.
HONDURAS	12	248	4	1.6	.	.
JAMAICA	12	89	1	1.1	.	.
KIRIBATI	12	54	.	.	.	.
MICRONESIA	12	66	.	.	.	.
NICARAGUA	12	174	7	4.0	.	.
PANAMA	12	110	1	.9	.	.
PARAGUAY	12	204	.	.	.	.
PERU *	5	6	.	.	.	.
SAMOA	12	52	.	.	.	.
SURINAME	12	37	.	.	.	.
TONGA	12	71	.	.	.	.
VANUATU	12	54	1	1.9	.	.
TOTAL IAP	264	2,293	24	1.0	.	.
ALL COUNTRIES	799	6,275	91	1.5	.	.

* Peace Corps countries opened or reopened in calendar year 2002: Bangladesh, East Timor, Kyrgyz Republic, Macedonia, Peru, Turkmenistan, Uzbekistan

** Peace Corps countries closed or suspended in calendar year 2002: Cote d'Ivoire, Estonia, Jordan, Latvia, Lithuania, Slovakia

*** Peace Corps country closed and reopened in calendar year 2002: Madagascar

Table does not include Bosnia, where only Crisis Corps Volunteers were present

Incidence = events/100 V/T-Years

Table 20. In 2002, Numbers and Rates of Peace Corps Volunteer Contact With Peace Corps Medical Officer (PCMO)

Y/Month	# Rpts	V/T - Years	Contacts	Contacts/ Month	Contacts/ V/T-
AFRICA Region					
BENIN	12	115	2479	207	1.8
BURKINA FASO	12	80	1842	154	1.9
CAMEROON	12	130	2371	198	1.5
CAPE VERDE	12	48	1792	149	3.1
COTE D'IVOIRE**	10	117	3246	325	2.8
GABON	12	56	883	74	1.3
GHANA	12	136	1661	138	1.0
GUINEA	12	105	2006	167	1.6
KENYA	12	132	4600	383	2.9
LESOTHO	12	94	1862	155	1.7
MADAGASCAR ***	7	44	170	24	.6
MALAWI	12	120	2192	183	1.5
MALI	12	140	2693	224	1.6
MAURITANIA	12	73	1289	107	1.5
MOZAMBIQUE	12	46	816	68	1.5
NAMIBIA	12	83	1206	101	1.2
NIGER	12	102	1543	129	1.3
SENEGAL	12	133	5110	426	3.2
SOUTH AFRICA	12	82	617	51	.6
TANZANIA	12	110	1293	108	1.0
THE GAMBIA	12	89	1525	127	1.4
TOGO	12	93	2167	181	1.9
UGANDA	12	33	1064	89	2.7
ZAMBIA	12	127	954	80	.6
TOTAL AFRICA	281	2,286	45,381	3,875	1.7
EMA Region					
ARMENIA	12	63	1235	103	1.6
BANGLADESH *	5	5	239	48	9.4
BULGARIA	12	115	3257	271	2.4
CHINA	12	86	2279	190	2.2
ESTONIA **	7	10	264	38	4.0
GEORGIA	12	41	793	66	1.6
JORDAN **	11	56	1875	170	3.0
KAZAKHSTAN	12	113	3534	295	2.6
KYRGYZ REPUBL*	10	19	449	45	2.3
LATVIA **	7	13	447	64	4.8
LITHUANIA **	7	13	287	41	3.1
MACEDONIA *	2	3	95	48	17.7
MOLDOVA	12	94	3212	268	2.8
MONGOLIA	12	78	1535	128	1.6
MOROCCO	12	147	1811	151	1.0
NEPAL	12	110	3069	256	2.3
PHILIPPINES	12	135	2036	170	1.3
ROMANIA	12	179	5448	454	2.5
RUSSIA/FAR EAST	12	39	675	56	1.4
RUSSIA/WESTERN	12	70	1263	105	1.5
SLOVAKIA **	7	22	1280	183	8.4
THAILAND	12	60	3425	285	4.8
TURKMENISTAN *	9	20	527	59	3.0
UKRAINE	12	183	2953	246	1.3
UZBEKISTAN *	9	23	396	44	1.9
TOTAL EMA	254	1,695	42,384	4,172	2.5

	# Rpts	V/T- Years	Contacts	Contacts/ Month	Contacts/ V/T-Y/Month
IAP Region					
BELIZE	12	60	1575	131	2.2
BOLIVIA	12	158	6138	512	3.2
COSTA RICA	12	30	490	41	1.4
DOMINICAN REPUBL	12	138	4175	348	2.5
EAST TIMOR *	7	9	316	45	4.9
EASTERN CARIBBEA	12	76	1852	154	2.0
ECUADOR	12	154	3979	332	2.1
EL SALVADOR	12	149	6270	523	3.5
GUATEMALA	12	247	5758	480	1.9
GUYANA	12	43	362	30	.7
HAITI	12	66	1331	111	1.7
HONDURAS	12	248	6113	509	2.1
JAMAICA	12	89	2047	171	1.9
KIRIBATI	12	54	479	40	.7
MICRONESIA	12	66	1056	88	1.3
NICARAGUA	12	174	3944	329	1.9
PANAMA	12	110	2782	232	2.1
PARAGUAY	12	204	3045	254	1.2
PERU *	5	6	222	44	7.5
SAMOA	12	52	1252	104	2.0
SURINAME	12	37	478	40	1.1
TONGA	12	71	1759	147	2.1
VANUATU	12	54	1852	154	2.9
TOTAL IAP	264	2,293	57,275	4,989	2.2
ALL COUNTRIES	799	6,275	145,040	13,067	2.1

* Peace Corps countries opened or reopened in calendar year 2002: Bangladesh, East Timor, Kyrgyz Republic, Macedonia, Peru, Turkmenistan, Uzbekistan

** Peace Corps countries closed or suspended in calendar year 2002: Cote d'Ivoire, Estonia, Jordan, Latvia, Lithuania, Slovakia

*** Peace Corps country closed and reopened in calendar year 2002: Madagascar

Table does not include Bosnia, where only Crisis Corps Volunteers were present

Contacts/month=(Total no. of reported PCV-PCMO contacts) / (No. of months country reported ESS)

Contacts/V/T-Year/Month=(Total no. of reported PCV-PCMO contacts) / (V/T-Year) / (No. of months country reported ESS)

Table 21. In 2002, Reported Malaria Chemoprophylaxis Use Among Peace Corps Volunteers

	# Rpts	V/T-Years	Percent of Volunteers Taking Agent: Mefloquine	Chloroquine	Malarone	Chlorpal	Doxycycline	Other	On Any Agent
AFRICA Region									
BENIN	12	115	79.2	.	.5	.	19.2	.	98.9
BURKINA FASO	12	80	78.8	.	2.3	.	14.2	.8	96.1
CAMEROON	12	130	92.5	.	.	.	3.0	.	95.5
CAPE VERDE	12	48	47.5	.	1.3	.	17.1	.	65.9
COTE D'IVOIRE**	10	117	84.3	.	.9	.	13.7	.	98.9
GABON	12	56	96.2	.	.	.	3.9	.	100.1
GHANA	12	136	75.2	.	3.5	.	15.8	.	94.5
GUINEA	12	105	80.9	.	1.6	.	13.2	.	95.7
KENYA	12	132	77.5	.	1.0	.	15.0	.	93.5
LESOTHO	12	94	6.4	.	.4	.	2.0	.	8.8
MADAGASCAR ***	7	44	78.6	.	7.7	1.5	11.8	.	99.6
MALAWI	12	120	81.1	.	.3	.	12.8	.	94.2
MALI	12	140	80.3	.	2.0	.	21.2	.	103.5
MAURITANIA	12	73	88.6	.	.	.	7.4	.	96.0
MOZAMBIQUE	12	46	86.1	.	2.7	.	9.4	.	98.2
NAMIBIA	12	83	83.6	.	.3	.	12.0	.	96.0
NIGER	12	102	91.9	.	.	.	4.8	.6	97.3
SENEGAL	12	133	70.1	.	4.3	.	22.3	.	96.8
SOUTH AFRICA	12	82	83.4	.	.	.	17.0	.	100.4
TANZANIA	12	110	93.5	.	.9	.	6.5	.	100.9
THE GAMBIA	12	89	83.6	.	4.6	.	7.8	.	96.0
TOGO	12	93	75.9	.	3.6	.	13.8	.	93.4
UGANDA	12	33	90.7	.	3.8	.	4.8	.	99.2
ZAMBIA	12	127	91.8	.	1.2	.	5.4	.	98.4
TOTAL AFRICA	281	2,286	79.2	.	1.6	<.1	12.0	.1	92.9
EMA Region									
ARMENIA	12	63	.	.	.	.	.	.	.
BANGLADESH *	5	5	73.4	.	.	.	23.4	.	96.9
BULGARIA	12	115	.	.	.	.	.	.	.
CHINA	12	86	2.0	.	1.7	.	.5	.	4.1
ESTONIA **	7	10	.	.	.	.	.	.	.
GEORGIA	12	41	.	.	.	.	.	.	.
JORDAN **	11	56	.	.	.	.	.	.	.
KAZAKHSTAN	12	113	.	.	.	.	.	.	.
KYRGYZ REPUBL*	10	19	.	.	.	.	.	.	.
LATVIA **	7	13	.	.	.	.	.	.	.
LITHUANIA **	7	13	.	.	.	.	.	.	.
MACEDONIA *	2	3	.	.	.	.	.	.	.
MOLDOVA	12	94	.	.	.	.	.	.	.
MONGOLIA	12	78	.	.	.	.	.	.	.
MOROCCO	12	147	.	.	.	.	.	.	.
NEPAL	12	110	8.8	47.2	.	.	.	.	55.9
PHILIPPINES	12	135	5.4	93.3	.2	.	1.5	.	100.5
ROMANIA	12	179	.	.	.	.	.	.	.
RUSSIA/FAR EAST	12	39	.	.	.	.	.	.	.
RUSSIA/WESTERN	12	70	.	.	.	.	.	.	.
SLOVAKIA **	7	22	.	.	.	.	.	.	.
THAILAND	12	60	.	.	.	.	.	.	.
TURKMENISTAN *	9	20	.	.	.	.	.	.	.
UKRAINE	12	183	.	.	.	.	.	.	.
UZBEKISTAN *	9	23	.	.	.	.	.	.	.
TOTAL EMA	254	1,695	1.3	10.4	.1	.	.2	.	12.1

(Continued)
Table 21. In 2002, Reported Malaria Chemoprophylaxis Use Among Peace Corps Volunteers

IAP Region	# Rpts	V/T-Years	Percent of Volunteers Taking Agent: Mefloquine	Chloroquine	Malarone	Chlorpal	Doxycycline	Other	On Any Agent
BELIZE	12	60	.	47.5	.	.	1.7	.	49.2
BOLIVIA	12	158	.	34.8	.	.	.	.	34.8
COSTA RICA	12	30	4.7	87.9	.	.	2.9	.	95.5
DOMINICAN REPUBL	12	138	.	94.7	.	.	1.1	.	95.8
EAST TIMOR *	7	9	63.9	.	13.1	.	22.1	.	99.2
EASTERN CARIBBEA	12	76	.	.	.	.	.	.	.
ECUADOR	12	154	45.0	.2	.4	.	15.0	.	60.5
EL SALVADOR	12	149	.	95.2	.	.	.2	.	95.3
GUATEMALA	12	247	1.6	92.8	.	.	<.1	.	94.4
GUYANA	12	43	78.1	.	7.4	.	10.3	.	95.8
HAITI	12	66	.	93.3	.	.	.	.	93.3
HONDURAS	12	248	.	99.3	.	.	.9	.3	100.4
JAMAICA	12	89	.	.	.	.	.	.	.
KIRIBATI	12	54	.	.	.	.	.	.	.
MICRONESIA	12	66	.	.	.	.	.	.	.
NICARAGUA	12	174	.	94.7	.	.	2.4	.	97.2
PANAMA	12	110	15.8	78.1	.	.	3.6	.	97.4
PARAGUAY	12	204	.	.	.	.	.	.	.
PERU *	5	6	.	.	.	.	6.4	6.4	12.8
SAMOA	12	52	.	.	.	.	.	.	.
SURINAME	12	37	42.9	.	.2	.	2.8	.	46.0
TONGA	12	71	.	.	.	.	.	.	.
VANUATU	12	54	77.7	.	.	.	23.5	.	101.2
TOTAL IAP	264	2,293	8.3	51.3	.2	.	2.5	<.1	62.3
ALL COUNTRIES	799	6,275	32.3	21.4	.7	<.1	5.4	<.1	59.8

N.B. Country-specific percentages = (summation of number of PCVs on each malaria prophylaxis each month) / (summation of number of PCVs in country each month).

Region and All Countries percentages = (summation of number of PCVs on each malaria prophylaxis each month) / (summation of number of PCVs, by region [or worldwide], in 2002).

*** Peace Corps countries opened or reopened in calendar year 2002: Bangladesh, East Timor, Kyrgyz Republic, Macedonia, Peru, Turkmenistan, Uzbekistan**

**** Peace Corps countries closed or suspended in calendar year 2002: Cote d'Ivoire, Estonia, Jordan, Latvia, Lithuania, Slovakia**

***** Peace Corps country closed and reopened in calendar year 2002: Madagascar**

Table does not include Bosnia, where only Crisis Corps Volunteers were present

Table 22. In 2002, Reported Vaccine and Immunobiologic Use Among Peace Corps Volunteers

	# Rpts	V/T-Years	Number of Doses Given: Hep. A	Hep. B	Jap. B	Mening.	Rabies Preexp.	Rabies Post-exp.	Rabies HRIG	Tick-borne Encephalitis
AFRICA Region										
BENIN	12	115	67	76	.	60	140	.	.	.
BURKINA FASO	12	80	69	64	.	177	146	2	.	.
CAMEROON	12	130	95	85	.	41	200	.	.	.
CAPE VERDE	12	48	66	61	.	31	90	.	.	.
COTE D'IVOIRE**	10	117	92	140	.	30	167	4	.	.
GABON	12	56	97	116	.	.	114	.	.	.
GHANA	12	136	69	21	.	74	53	7	.	.
GUINEA	12	105	75	85	.	40	99	.	.	.
KENYA	12	132	103	102	.	64	138	46	.	.
LESOTHO	12	94	58	82	.	89	130	9	.	.
MADAGASCAR ***	7	44	.	.	.	.	.	8	.	.
MALAWI	12	120	83	75	.	40	127	20	.	.
MALI	12	140	114	129	.	79	241	6	.	.
MAURITANIA	12	73	42	55	.	90	132	.	.	.
MOZAMBIQUE	12	46	49	39	.	59	98	.	.	.
NAMIBIA	12	83	79	120	.	62	150	.	.	.
NIGER	12	102	121	133	.	102	255	.	.	.
SENEGAL	12	133	88	122	.	67	185	.	.	.
SOUTH AFRICA	12	82	91	121	.	17	124	1	.	.
TANZANIA	12	110	96	55	.	68	132	.	.	.
THE GAMBIA	12	89	70	130	.	28	41	.	.	.
TOGO	12	93	60	76	.	61	161	28	.	.
UGANDA	12	33	34	31	.	21	49	2	.	.
ZAMBIA	12	127	72	97	.	64	159	5	.	.
TOTAL AFRICA	281	2,286	1,790	2,015	.	1,364	3,131	138	.	.
EMA Region										
ARMENIA	12	63	41	118	.	.	.	1	.	.
BANGLADESH *	5	5	7	13	33	10	30	.	.	.
BULGARIA	12	115	90	128	.	.	.	10	2	.
CHINA	12	86	88	52	144	.	93	.	.	.
ESTONIA **	7	10	.	.	.	.	.	.	.	.
GEORGIA	12	41	38	30	.	.	62	.	.	.
JORDAN **	11	56	40	31	.	19	68	.	.	.
KAZAKHSTAN	12	113	85	130	.	79	239	1	.	272
KYRGYZ REPUBL*	10	19	15	57	.	59	63	63	.	133
LATVIA **	7	13	.	.	.	.	.	.	.	.
LITHUANIA **	7	13	.	.	.	.	.	.	.	.
MACEDONIA *	2	3	18	31	.	.	.	.	.	.
MOLDOVA	12	94	83	105	.	.	196	10	.	.
MONGOLIA	12	78	64	75	184	85	164	.	.	.
MOROCCO	12	147	109	108	.	112	173	8	2	.
NEPAL	12	110	95	129	242	74	238	26	.	.
PHILIPPINES	12	135	39	75	88	.	85	.	.	.
ROMANIA	12	179	135	202	.	.	.	16	3	.
RUSSIA/FAR EAST	12	39	27	21	.	.	.	4	.	32
RUSSIA/WESTERN	12	70	32	30	.	.	2	1	1	32
SLOVAKIA **	7	22	.	.	.	.	.	.	.	.
THAILAND	12	60	56	56	73	.	107	4	.	.
TURKMENISTAN *	9	20	44	67	.	50	146	.	.	.
UKRAINE	12	183	162	183	.	26	.	5	1	.
UZBEKISTAN *	9	23	34	42	.	42	129	.	.	.
TOTAL EMA	254	1,695	1,302	1,683	764	556	1,795	149	9	469

(Continued)
Table 22. In 2002, Reported Vaccine and Immunobiologic Use Among Peace Corps Volunteers

IAP Region	# Rpts	V/T-Years	Number of Doses Given: Hep. A	Hep. B	Jap. B	Mening.	Rabies Preexp.	Rabies Post-exp.	Rabies HRIG	Tick-borne Encephalitis
BELIZE	12	60	44	57	.	.	102	2	.	.
BOLIVIA	12	158	101	79	.	.	154	5	.	.
COSTA RICA	12	30	19	20	.	.	35	26	.	.
DOMINICAN REPUBL	12	138	105	114	.	107	252	10	.	.
EAST TIMOR *	7	9	.	.	55	.	23	.	.	.
EASTERN CARIBBEA	12	76	79	82	.	.	60	.	.	.
ECUADOR	12	154	78	84	.	.	213	4	.	.
EL SALVADOR	12	149	95	103	.	.	205	.	.	.
GUATEMALA	12	247	168	179	.	.	332	18	.	.
GUYANA	12	43	24	18	.	.	46	.	.	.
HAITI	12	66	44	50	.	48	122	21	.	.
HONDURAS	12	248	112	206	.	.	335	21	.	.
JAMAICA	12	89	96	54	.	.	.	.	.	.
KIRIBATI	12	54	24	79	.	.	.	.	.	.
MICRONESIA	12	66	38	31	.	.	.	.	.	.
NICARAGUA	12	174	141	147	.	.	278	.	.	.
PANAMA	12	110	78	95	.	.	172	28	.	.
PARAGUAY	12	204	128	194	.	.	246	.	.	.
PERU *	5	6	22	15	.	.	88	.	.	.
SAMOA	12	52	43	40	.	.	.	.	.	.
SURINAME	12	37	21	31	.	.	56	28	.	.
TONGA	12	71	73	73	.	.	.	.	.	.
VANUATU	12	54	44	48	.	8	.	.	.	.
TOTAL IAP	264	2,293	1,577	1,799	55	163	2,719	163	.	.
ALL COUNTRIES	799	6,275	4,669	5,497	819	2,083	7,645	450	9	469

* Peace Corps countries opened or reopened in calendar year 2002: Bangladesh, East Timor, Kyrgyz Republic, Macedonia, Peru, Turkmenistan, Uzbekistan

** Peace Corps countries closed or suspended in calendar year 2002: Cote d'Ivoire, Estonia, Jordan, Latvia, Lithuania, Slovakia

*** Peace Corps country closed and reopened in calendar year 2002: Madagascar

Table does not include Bosnia, where only Crisis Corps Volunteers were present

Table 23. In 2002, Reported Typhoid Vaccine Use Among Peace Corps Volunteers

	# Rpts	V/T-Years	Oral # Doses	Oral % of all Doses	Heat Inactivated # Doses	Heat Inactivated % of all Doses	VI Injection # Doses	VI Injection % of all Doses	TOTAL
AFRICA Region									
BENIN	12	115	.	.	.	.	62	100.0	62
BURKINA FASO	12	80	.	.	.	.	44	100.0	44
CAMEROON	12	130	.	.	.	.	66	100.0	66
CAPE VERDE	12	48	.	.	.	.	33	100.0	33
COTE D'IVOIRE**	10	117	.	.	.	.	75	100.0	75
GABON	12	56	.	.	.	.	40	100.0	40
GHANA	12	136	.	.	.	.	.	.	.
GUINEA	12	105	.	.	.	.	25	100.0	25
KENYA	12	132	.	.	.	.	76	100.0	76
LESOTHO	12	94	.	.	.	.	77	100.0	77
MADAGASCAR ***	7	44	.	.	.	.	.	.	.
MALAWI	12	120	.	.	.	.	39	100.0	39
MALI	12	140	.	.	.	.	77	100.0	77
MAURITANIA	12	73	.	.	.	.	56	100.0	56
MOZAMBIQUE	12	46	.	.	.	.	33	100.0	33
NAMIBIA	12	83	.	.	.	.	69	100.0	69
NIGER	12	102	.	.	.	.	104	100.0	104
SENEGAL	12	133	.	.	.	.	63	100.0	63
SOUTH AFRICA	12	82	.	.	.	.	46	100.0	46
TANZANIA	12	110	.	.	.	.	116	100.0	116
THE GAMBIA	12	89	.	.	.	.	59	100.0	59
TOGO	12	93	.	.	.	.	58	100.0	58
UGANDA	12	33	.	.	.	.	23	100.0	23
ZAMBIA	12	127	.	.	.	.	67	100.0	67
TOTAL AFRICA	281	2,286	.	.	.	.	1,308	100.0	1,308
EMA Region									
ARMENIA	12	63	.	.	.	.	.	.	.
BANGLADESH *	5	5	.	.	.	.	10	100.0	10
BULGARIA	12	115	.	.	.	.	130	100.0	130
CHINA	12	86	.	.	.	.	46	100.0	46
ESTONIA **	7	10	.	.	.	.	.	.	.
GEORGIA	12	41	.	.	.	.	21	100.0	21
JORDAN **	11	56	.	.	.	.	16	100.0	16
KAZAKHSTAN	12	113	.	.	.	.	80	100.0	80
KYRGYZ REPUBL*	10	19	.	.	.	.	57	100.0	57
LATVIA **	7	13	.	.	.	.	.	.	.
LITHUANIA **	7	13	.	.	.	.	.	.	.
MACEDONIA *	2	3	.	.	.	.	47	100.0	47
MOLDOVA	12	94	.	.	.	.	58	100.0	58
MONGOLIA	12	78	.	.	.	.	53	100.0	53
MOROCCO	12	147	.	.	.	.	78	100.0	78
NEPAL	12	110	49	39.5	.	.	75	60.5	124
PHILIPPINES	12	135	.	.	.	.	35	100.0	35
ROMANIA	12	179	.	.	.	.	.	.	.
RUSSIA/FAR EAST	12	39	.	.	.	.	.	.	.
RUSSIA/WESTERN	12	70	.	.	.	.	4	100.0	4
SLOVAKIA **	7	22	.	.	.	.	.	.	.
THAILAND	12	60	.	.	.	.	32	100.0	32
TURKMENISTAN *	9	20	.	.	.	.	46	100.0	46
UKRAINE	12	183	.	.	.	.	102	100.0	102
UZBEKISTAN *	9	23	.	.	.	.	46	100.0	46
TOTAL EMA	254	1,695	49	5.0	.	.	936	95.0	985

(Continued)
Table 23. In 2002, Reported Typhoid Vaccine Use Among Peace Corps Volunteers

IAP Region	# Rpts	V/T-Years	Oral # Doses	Oral % of all Doses	Heat Inactivated # Doses	Heat Inactivated % of all Doses	VI Injection # Doses	VI Injection % of all Doses	TOTAL
BELIZE	12	60	.	.	.	.	30	100.0	30
BOLIVIA	12	158	.	.	.	.	75	100.0	75
COSTA RICA	12	30	.	.	.	.	25	100.0	25
DOMINICAN REPUBL	12	138	.	.	.	.	79	100.0	79
EAST TIMOR *	7	9	.	.	.	.	.	.	.
EASTERN CARIBBEA	12	76	.	.	.	.	20	100.0	20
ECUADOR	12	154	2	2.7	.	.	73	97.3	75
EL SALVADOR	12	149	.	.	.	.	141	100.0	141
GUATEMALA	12	247	.	.	.	.	108	100.0	108
GUYANA	12	43	.	.	.	.	19	100.0	19
HAITI	12	66	.	.	.	.	52	100.0	52
HONDURAS	12	248	.	.	.	.	111	100.0	111
JAMAICA	12	89	.	.	.	.	46	100.0	46
KIRIBATI	12	54	.	.	.	.	31	100.0	31
MICRONESIA	12	66	.	.	.	.	44	100.0	44
NICARAGUA	12	174	.	.	.	.	79	100.0	79
PANAMA	12	110	.	.	.	.	60	100.0	60
PARAGUAY	12	204	.	.	.	.	70	100.0	70
PERU *	5	6	.	.	.	.	28	100.0	28
SAMOA	12	52	.	.	.	.	20	100.0	20
SURINAME	12	37	.	.	.	.	24	100.0	24
TONGA	12	71	.	.	.	.	67	100.0	67
VANUATU	12	54	.	.	.	.	32	100.0	32
TOTAL IAP	264	2,293	2	.2	.	.	1,234	99.8	1,236
ALL COUNTRIES	799	6,275	51	1.4	.	.	3,478	98.6	3,529

* Peace Corps countries opened or reopened in calendar year 2002: Bangladesh, East Timor, Kyrgyz Republic, Macedonia, Peru, Turkmenistan, Uzbekistan

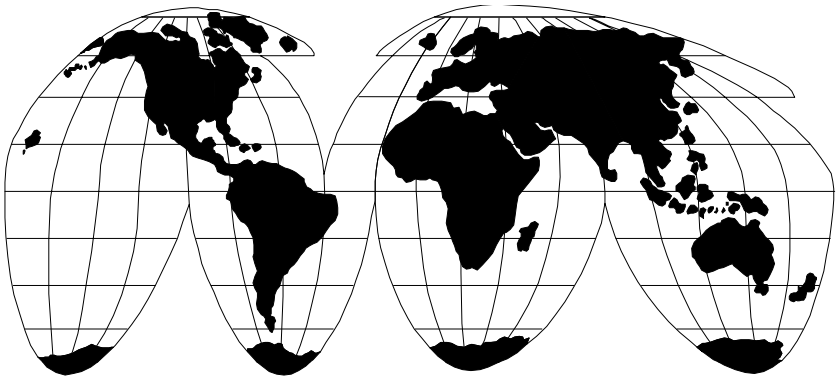
** Peace Corps countries closed or suspended in calendar year 2002: Cote d'Ivoire, Estonia, Jordan, Latvia, Lithuania, Slovakia

*** Peace Corps country closed and reopened in calendar year 2002: Madagascar

Table does not include Bosnia, where only Crisis Corps Volunteers were present

APPENDIX C

Numbers and Incidence of Reportable Health Conditions for Calendar Year 2002



Based on Monthly Epidemiologic Reports and Event Reports Submitted by PCMOs

Peace Corps Regions

Health of the Volunteer 2002

AFRICA

Africa

Benin
Burkina Faso
Cameroon
Cape Verde
Cote d'Ivoire
Gabon
The Gambia
Ghana
Guinea
Kenya
Lesotho
Madagascar
Malawi
Mali
Mauritania
Mozambique
Namibia
Niger
Senegal
South Africa
Tanzania
Togo
Uganda
Zambia

EMA

Europe, Mediterranean, and Asia

Armenia
Bangladesh
Bulgaria
China
Estonia
Georgia
Jordan
Kazakhstan
Kyrgyz Republic
Latvia
Lithuania
Macedonia
Moldova
Mongolia
Morocco
Nepal
Philippines
Romania
Russia/Far East
Russia/Western
Slovakia
Thailand
Turkmenistan
Ukraine
Uzbekistan

IAP

Inter-America and the Pacific

Belize
Bolivia
Costa Rica
Dominican Republic
Eastern Caribbean
East Timor
Ecuador
El Salvador
Guatemala
Guyana
Haiti
Honduras
Jamaica
Kiribati
Micronesia
Nicaragua
Panama
Paraguay
Peru
Samoa
Suriname
Tonga
Vanuatu

*Peace Corps countries **opened** or **reopened** in calendar year 2002: Bangladesh, East Timor, Kyrgyz Republic, Macedonia, Peru, Turkmenistan, Uzbekistan*

*Peace Corps countries **closed** in calendar year 2002: Cote d'Ivoire, Estonia, Jordan, Latvia, Lithuania, Slovakia*

*Peace Corps country **closed** and **reopened** in calendar year 2002: Madagascar*

Subject	Text (page #)	Figure #	Table #
Alcohol Problems	16	51	1
Antimalarials	10		21
Asthma	15	49, 50	14
Cardiovascular Problems	16		1
Deaths	9	27, 28, 29	
Dengue	11	32	2
Dental Problems	6	15	2
Dermatitis	5		3
Diarrhea	5	9, 10	5
Environmental Concerns	9	25, 26	3
Febrile Illnesses	8		4
Female V/T-Years	14	43	
Filariasis	12	34	4
Hepatitis	3	4	6
HIV Infections	13	37-42	
Hospitalizations, In-Country	17	56	6
Injuries, Assault-Related			9
Injuries, Bicycle	7	18	7
Injuries, Motor Vehicle	7	19	8
Injuries, Motorcycle	7	22, 23	8
Injuries, Pedestrian	7	20	7
Injuries, Sports-Related	6	17	9
Injuries, Unintentional	6	16-23	7,8,9,10
Injuries, Water-Related	7	21	10
Intestinal Helminths	13	35, 36	5
Leishmaniasis			11
Lower Respiratory Tract Illnesses	9	24	15
Malaria	10	30, 31	11, 12
Medical Evacuations (Medevacs)	16	53, 54, 55	13
Mental Health Problems	6	13, 14	14
Non-Sexually Transmitted Gyn. Infection	8		16
PCMO Contacts	16	52	20
Pregnancy	14	42, 44, 45	16
Schistosomiasis	11	33	18
Sexually Transmitted Diseases	2	1, 2, 3	17, 18
Tuberculosis	14	46, 47, 48	19
Upper Respiratory Tract Illnesses	5	11, 12	15
Vaccines	15		22, 23

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