

**PUBLIC HEALTH NEWS & NOTES**

in Italy and is expected to announce results on risk factors and incidence trends.

The objective of MONICA was to measure trends in mortality and morbidity from coronary heart disease and cerebrovascular disease and to assess the extent to which they are related to changes in known risk factors measured at the same time in defined communities in various countries.

The target group is people between the ages of 35 and 64 in 38 population centers in 27 countries; to date, 15 million people have been monitored.

One key finding of MONICA is that there are significant differences in deaths from cardiovascular disease according to location and gender. In the overall MONICA findings, heart attack rates in men ages 35 to 64 have consistently been four to five times higher than in women in the same age group. This discrepancy is narrowing somewhat as women begin to take on some of the behaviors previously attributed to men—high stress lifestyles, a heavier rate of smoking, and the combination of a lack of proper exercise and inappropriate nutrition.

It is interesting to note that MONICA researchers have demonstrated that there are population differences in risk factors such as smoking, blood pressure, and blood cholesterol and that these differences may outweigh the normal male-female split. For example, women in Glasgow, Scotland, and Belfast, Northern Ireland, have higher heart attack rates than some southern European men. Men in Finland and women in Scotland are at the top of the international table of risk, according to the MONICA data.

The reasons are likely to be linked to risk factors—women in Scotland and Northern Ireland are among the world's heaviest smokers; in Finland, the problems of cardiovascular disease among men are probably due to a combination of high blood pressure,

excess body weight, and elevated blood cholesterol. Meanwhile, men and women in China, Spain, and southern France are among those with the lowest risk of the disease. The low rates there may be attributable to good diets.

In the latest five-year data examined by the committee, a link was found between trends in cardiovascular disease and changes in risk factors such as smoking, high blood pressure, cholesterol, and body weight. Although smoking has declined in western populations in the 35 to 64 age group, it is increasing in China, the only developing country in the MONICA study. Historically, China has had one of the lowest cardiovascular disease rates in the world.

Meanwhile, in many Western populations, obesity is becoming more widespread because of poor diet and insufficient physical activity. This increase may reverse the Western decline in cardiovascular disease established several years ago. If so, researchers will be able to show a clear link between a major risk factor and heart disease.

### Geographic Literacy Important Today

Geographers play a major role in collecting and analyzing vast amounts of data that contribute to an understanding of phenomena such as population growth, deforestation, international development, and regional conflicts.

A report by a committee of the National Research Council explores in detail the increasing significance of geography in education, research, and public policy. The report outlines comprehensive steps that the geographic community should take to strengthen the discipline to meet demands in the coming decades.

Citizens who are geographically literate are better equipped to explore, and comprehend, the world around them, the report says. To bolster geographic literacy, the report recommends that the United States launch a

program for adult citizens and leaders in the public and private sector; geographic organizations should join forces with government, business, and nonprofit groups to educate adults because the nation cannot afford to wait for future generations of geographically literate leaders. Such programs would supplement the report's recommendations for upgrading the geographic education of American students.

At the same time, the geographic community should focus more of its limited research dollars on multidisciplinary projects that address major national and international problems such as global change, conflict resolution, and urbanization.

The report gives examples of geography's many contributions, including insights on:

- why poverty and prosperity concentrate and persist in certain geographic regions;
- how human activities, past and present, have changed local, regional, and global climates and what effects those changes have had on food production and water supply systems;
- how an epidemic like AIDS spreads and how health care services can be delivered more efficiently and effectively to deal with such outbreaks.

*Copies of Rediscovering Geography: New Relevance For Science and Society are available from the National Academy Press for \$34.95 (prepaid) plus shipping charges of \$4 for the first copy and 50 cents for each additional copy; tel. 202-334-3313 or 800-624-6242.*

### New Rules and Requirements for Travelers

The World Health Organization (WHO) has published the latest annual edition of a guide entitled *International Travel and Health: Vaccination Requirements and Health Advice*.

This publication, which is updated every year, gives advice on

the precautions to be taken by travelers who wish to safeguard their health. Aimed at physicians, the tourism industry, and airline and shipping companies, it contains the latest information on general precautions all travelers should take, on specific health risks in various parts of the world, on vaccinations recommended or deemed advisable by WHO, and on vaccinations legally required of people entering specific countries.

One of the first chapters gives information on malaria. For each country where malaria is endemic, information is given on its geographic and seasonal distribution, the altitude of the regions affected, the predominant type of mosquito, and the degree of resistance of the parasites to drugs. The guide also recommends preventive measures.

Another chapter covers environmental risks, especially diseases transmitted by arthropods, food, or water.

A complete list of all vaccinations recommended by WHO is given in a table showing information on the vaccine, the age from which it can be administered, and how long before the traveler's departure it should be provided. There is also advice on vaccination of travelers infected with the AIDS virus.

International Travel and Health can be ordered for \$15.30 from WHO Distribution and Sales, Geneva; tel. 41-22-791-2476; fax 41-22-791-4857; e-mail <publications@who.ch>.

## WHO Predicts Visual Disability to Double by 2020

Experts of the World Health Organization (WHO) warn that within the next quarter century blindness and serious visual disability—already a public health problem—will become a major socioeconomic burden worldwide and may even thwart progress in some middle- and low-income countries.

To curb this trend, a new global initiative is needed, bringing together international organizations, governments, nongovernmental development organizations, and industry in a WHO-coordinated international effort to eliminate avoidable blindness and visual disability.

At present, approximately seven million people become blind or severely visually disabled each year. More than 70% are successfully treated. Thus, the number of blind people worldwide is increasing by about two million per year. Eighty percent of new cases are related to aging.

Demographic trends indicate that by the year 2020, the number of elderly people (age 60 and older) will almost double, reaching 1.2 billion. Consequently, experts project that by 2020 there will be about 54 million blind people ages 60 and older, 50 million of them in developing countries. The total number of blind people in other age groups is projected to be more than 21 million.

Major age-related avoidable causes of blindness and visual disability include cataracts (which account for around 16 million cases), glaucoma (5.2 million), diabetic retinopathy (around 2 million), Vitamin A deficiency (350,000 children annually), onchocerciasis or "river blindness" (270,000 cases), leprosy (50,000 to 100,000 people) and injuries (over one million people).

As the burden of disabling eye diseases increases, so will the consequent need and demand for eye care services. The costs for eye care and surgery are also expected to escalate because of increased demand and as a result of the introduction of new technologies.

## WHO Announces Vaccine Formula

The composition of the influenza vaccine for the 1997–1998 season was announced at a meeting of international experts held at the World Health Organization (WHO) headquarters in Geneva. One of the three

influenza vaccine components has been changed from last year.

The WHO group has advised national health authorities and pharmaceutical companies on the three selected virus strains that should be used to produce vaccines for the next influenza season. Sufficient time has been allowed for companies to produce the vaccine before the new influenza season starts.

The degree of protection provided by influenza vaccines varies depending on the age and immune status of the recipient, but 50% to 80% of recipients will be protected against disease when there is a good match between the vaccine and strains of influenza that are in circulation.

For the adult population, one dose of inactivated vaccine should be adequate. Previously unimmunized children, however, should receive two doses of vaccine, with an interval of at least four weeks between doses.

Three main types of influenza viruses are currently circulating among the world's population. These viruses all have a remarkable capacity to change their antigenic characteristics from year to year. They are known as A(H1N1), A(H3N2), and B. Vaccines are, therefore, composed of two influenza strains of type A and one type B strain. The latest formula recommended by WHO is:

- an A/Wuhan/359/95(H3N2)-like strain
- an A/Bayern/7/95(H1N1)-like strain
- a B/Beijing/184/93-like strain.

This differs from last year's composition in that the A/Bayern/7/95 (H1N1) strain replaces an A/Singapore/6/86(H1N1)-like strain.

So far during the 1996–1997 influenza season, several countries have reported moderate to severe epidemics. In North America and parts of Europe, influenza B has been reported frequently, either along with influenza A or following the decline of influenza A activity. Only a few laboratory-confirmed cases of influenza A(H1N1) have been reported.