

1999 Annual Meeting of the American Medical Association

Reports of the Council on Scientific Affairs

Title	Page
Use of Blood Therapeutically Drawn from Hemochromatosis Patients	3
Over-the-Counter Inhalers in Asthma	5
Boxing Injuries	6
Organized Medicine's Role in the National Response to Terrorism	8
Review of Guidelines for Pre-test and Post-test Education and Counseling of the National Society of Genetic Counselors	9
Obesity as a Major Public Health Problem	10
Cloning and Embryo Research	12
Review of AMA Recommendations on Folic Acid Supplementation	13
Effects of Work on Pregnancy	14
Seclusion and Restraint of Children and Adolescents	15
Opioids in Chronic Nonmalignant Pain	17
Reduction of the Medical and Public Health Consequences of Drug Abuse: Update	19
Implications of Brain Development Research	22
Mammographic Screening for Asymptomatic Women	23

1999 Annual Meeting of the American Medical Association, Reports of the Council on Scientific Affairs cont.

Title	Page
Publications Policy of the Council on Scientific Affairs	24
Chemoprophylaxis for Health Care Workers and Medical Students	27
In-line Skating	29

EDITOR'S NOTE: *The Recommendations in these report summaries reflect AMA policy at the time the reports were adopted by the AMA House of Delegates. Consult the AMA PolicyFinder for the most recent AMA policy and directives.*

1999 AMA Annual Meeting

Summaries and Recommendations of Council on Scientific Affairs Reports

Use of Blood Therapeutically Drawn from Hemochromatosis Patients (CSA Rep. 1, A-99)

SUMMARY

Objective. To assess the feasibility of the unrestricted and unlabeled use of blood drawn therapeutically from patients with hereditary hemochromatosis (HH) in the United States via a review of the scientific literature, current media reports, and governmental regulations.

Data Sources. Literature searches were conducted in the MEDLINE database from 1966 through 1998 on the terms *hemochromatosis blood donation*, and *voluntary blood donation*. Lexis/Nexis news databases were searched for developments in the last two years using the same terms. The World Wide Web was searched using the key terms "blood donation" and "hemochromatosis" and was employed to access the Code of Federal Regulations and the Food and Drug Administration (FDA) to determine regulatory actions. Additional information was obtained through direct consultation with leading experts in the field of transfusion medicine.

Data Extraction. English-language articles were selected based on their ability to provide information pertinent to assessing the feasibility of the unrestricted and unlabeled use of blood drawn therapeutically from patients with HH in the United States.

Results. HH is an autosomal genetic disorder that cannot be transmitted via blood transfusion. However, treatment for persons with this disease involves frequent, lifelong therapeutic venesections that may cost up to \$200 per phlebotomy. Thus, persons with HH undergoing therapeutic phlebotomy cannot be classified as voluntary donors by the FDA's current definition because there is the potential for significant personal monetary benefit to be gained by patients with HH from their blood "donation." The highest level of safety of the United States blood supply depends on the use of volunteer blood donors who give blood solely on the basis of altruistic intent. This is documented by several studies that have shown an increase in the prevalence of bloodborne viral pathogens in blood obtained from compensated, directed, or autologous donors when compared to blood drawn from volunteer donors. In contrast, there have been few studies demonstrating that blood drawn from HH patients is at least as safe as blood from volunteer donors with respect to bloodborne viral pathogens. In addition, other technical, ethical and legal issues may obstruct the unrestricted, unlabeled use of therapeutically drawn blood from HH patients for direct transfusion.

Conclusions. The highest level of safety for the US blood supply is required by the National Blood Policy of 1974. In order to ensure this level of safety, the concept of an all-volunteer blood donation system based entirely on the altruistic intent of the donor cannot be compromised. Until a system exists whereby the altruistic intent of the blood donor with HH can be guaranteed, the prudent medical position remains recommendation against the unrestricted, unlabeled use of therapeutically drawn blood for direct transfusion.

RECOMMENDATIONS

The following statements, recommended by the Council on Scientific Affairs, were adopted by the AMA House of Delegates as AMA policy at the 1999 AMA Annual Meeting.

1. The AMA encourages physicians to explain to their patients that hereditary hemochromatosis (HH) has a genetic basis, that the disease is not transmissible via blood transfusions, and that the blood from persons with HH is not necessarily unsuitable for direct transfusion.
2. The AMA supports the concepts of altruistic intent and the use of volunteer blood donors as fundamental to ensuring the highest safety of the United States blood supply.
3. The AMA recommends against the unlabeled use for direct transfusion of blood drawn therapeutically from persons with HH until a means to ensure their altruistic intent is available, such as when therapeutic phlebotomies are available at no charge to persons requiring them.

NOTE: The full text of this report has been published: Tan L, Khan MK, Hawk JC III, for the Council on Scientific Affairs. Use of blood therapeutically drawn from hemochromatosis patients. *Transfusion*. 1999;39:1018-1026. (September 1999)

Over-the-Counter Inhalers in Asthma (CSA Rep. 2, A-99)

SUMMARY

This report evaluates the available evidence on the safety (including product labeling) and efficacy of over-the-counter (OTC) epinephrine inhalant devices intended for the treatment of mild intermittent asthma.

The occasional use of OTC epinephrine inhalers appears to be safe and effective when used according to labeled instruction by individuals with only mild, intermittent disease. Individuals who grossly misuse/abuse these products are subject to severe adverse reactions, including death. Limited survey data suggest that approximately 20% of individuals using OTC epinephrine inhalers have mild-to-moderate persistent asthma. According to recent consensus guidelines, these individuals should be under a physician's care and receiving corticosteroid therapy.

RECOMMENDATIONS

The following statements, recommended by the Council on Scientific Affairs, were adopted by the AMA House of Delegates as AMA policy at the 1999 AMA Annual Meeting.

1. The AMA supports strengthening the product labeling for OTC epinephrine inhalers to better educate users about patterns of inappropriate use; to include clear statements that the use of OTC inhalers can be dangerous; to urge users to seek medical care if symptoms do not improve or if they meet criteria for the presence of persistent disease; and to encourage explicit discussions with physicians about dosage when these products are used.
2. The AMA encourages the Food and Drug Administration to reexamine whether OTC epinephrine inhalers should be removed from the market.
3. In the event that these products continue to be marketed OTC, further information should be obtained to determine whether OTC availability is a risk factor for asthma morbidity and mortality.

NOTE: The full text of this report has been published: Dickinson BD, Altman RD, Deitchman SD, Champion HC, for the Council on Scientific Affairs. Safety of over-the-counter inhalers for asthma. <i>Chest</i> . 2000;118:522-526. (August)

Boxing Injuries (CSA Rep. 3, A-99)

SUMMARY

Objective. To review the mechanisms and incidence of boxing-induced acute and chronic brain injury, and ocular complications, and offer recommendations for reducing boxing-related injury.

Methods. Articles for this report were selected from a MEDLINE search of the literature from 1966 to December 1998 using the key words *dementia pugilistica* and *boxing*, cross indexed with the terms *injury*, *brain injuries*, *ocular*, *retina*, *prevention and control*, *etiology*, *neuropsychology*, and *legislation and jurisprudence*. A total of 248 articles were retrieved. Studies that examined acute changes in brain function immediately after a knockout or bout were excluded from analysis. Additional articles were derived by manual review of retrieved references.

Results. Acute traumatic ocular injuries occur in boxers. Long-term ocular injuries affect a significant proportion of both amateur and professional boxers and include retinal tears, holes, and detachments. Boxing-induced acute brain injury can cause death, although acute mortality from boxing is rare. A subpopulation of professional boxers suffers from chronic neurological injury, the severity of which in later life correlates in some studies with the frequency of exposure (number of bouts), and possibly severity of head trauma as measured by the occurrence of technical or concussive knockout. The presence of APOE e4 may accelerate or potentiate neurological damage.

Neuropsychological testing of young professional (and amateur) boxers indicates that these individuals have a lower baseline performance on many tests. Results of most modern studies involving only amateur boxers suggest that in young subjects (adolescents) moderate boxing exposure does not cause significant additional impairment on psychometric testing.

Conclusions. Ocular injuries occur frequently in both amateur and professional boxers. An initial complete examination should be required before licensure for either amateur or professional boxers. This initial examination should include visual acuity, visual fields, slit-lamp biomicroscopy, intraocular pressure measurements, gonioscopy, and a dilated vitreoretinal examination including indirect ophthalmoscopy with scleral depression. This examination should be repeated at least annually. Mandatory periods of exemption from ring activity should be instituted for individuals with retinal tears and for boxers with repaired retinal detachments.

Variables such as sparring frequency and exposure, and intervals between bouts, have not been adequately examined, and may explain the failure of some studies to establish clear correlation between the number of bouts and neurological sequelae, particularly in "professional" boxers. All such individuals have had variable amounts of amateur exposure. The development of objective brain injury risk assessments to exclude individual boxers from sparring or fighting, including the use of biochemical markers of brain injury risk, neuroimaging, clinical neurological assessment, neurophysiological assessment, and other indices of cumulative brain injury, are recommended in an attempt to reduce the occurrence of long-term decrements in brain function in boxers. Further long-term outcome data should be obtained on amateur boxers, in order to more accurately establish the risks of participation.

RECOMMENDATIONS

The following statements, recommended by the Council on Scientific Affairs, were adopted by the AMA House of Delegates as AMA policy at the 1999 AMA Annual Meeting.

1. AMA Policy H-470.908, which supports a ban on professional and amateur boxing in the United States, and Policies H-470.970, H-470.973, H-470.980, and H-470.984 are reaffirmed.

2. Until such time as boxing is banned in this country, the following preventive strategies should be pursued to reduce brain and eye injuries in boxers: (a) Ideally, head blows should be prohibited. Otherwise, the AMA should encourage universal use of protective garb such as headgear, and thumbless, impact-absorbing gloves. (b) The World Boxing Council, World Boxing Association, and other regulatory bodies should develop and enforce objective brain injury risk assessment tools to exclude individual boxers from sparring or fighting including APOE e4 screening, neuroimaging, clinical neurological assessment, neurophysiological assessment, and indices of cumulative brain injury. (c) The World Boxing Council, World Boxing Association, and other regulatory bodies should develop and enforce standard criteria for referees, ringside officials, and ringside physicians to halt sparring or boxing bouts when a boxer has experienced concussive or subconcussive blows that place him or her at imminent risk of more serious injury. (d) The World Boxing Council, World Boxing Association, and other regulatory bodies should encourage implementation of measures advocated by the World Medical Boxing Congress designed to reduce the incidence of brain and eye injuries. (e) The World Boxing Council, World Boxing Association, and other regulatory bodies should require initial and repeat eye examinations for amateur and professional boxers and mandate suspensions from sparring or boxing for specific ocular pathology according to recommendations of the American Academy of Ophthalmology.
3. The AMA will: (a) Promote the concept that the professional responsibility of the physician who serves in a medical capacity at a boxing contest is to protect the health and safety of the contestants. The desire of spectators, promoters of the event, or even injured athletes that they not be removed from the contest should not be controlling. The physician's judgment should be governed only by medical considerations. (b) Develop and promote guidelines for adolescent health that include inquiring about participation in boxing, and that promote participation in other individual or team sports. (c) Work with the Surgeon General, AMA Alliance, Brain Injury Association, Brain Trauma Foundation, American Academy of Neurology, American Academy of Ophthalmology, and other interested groups to develop a public campaign to prevent boxing brain and eye injuries. (d) Incorporate these strategies into the AMA's broad initiatives to reduce violence. (e) Encourage further research into the mechanisms, pathophysiology, prevention, and treatment of boxing brain and eye injuries
4. Further long-term outcome data should be obtained from amateur boxers, in order to more accurately establish the risks of participation.
5. This report will be widely disseminated to physicians, as well as governmental bodies and various commissions that regulate boxing.

Organized Medicine's Role in the National Response to Terrorism (CSA Rep. 4, A-99)

SUMMARY

At its February 1999 meeting, the Council on Scientific Affairs (CSA) held a briefing seminar to learn about national planning for responding to mass casualty events resulting from acts of nuclear, chemical and biological terrorism. The Council's interest was prompted by Federal planning efforts (including those announced by President Clinton) and by recent well-publicized events involving suspected anthrax exposures. The Council was addressed by representatives from the US Army Medical Research and Materiel Command; the Centers for Disease Control and Prevention; and the American College of Emergency Physicians.

These speakers briefed the Council on current issues including: events that have already occurred; the known potential for a terrorist attack involving chemical or biological weapons in the United States; and current efforts by the US Departments of Defense, Health and Human Services, and Justice to develop systems to anticipate and respond to these incidents.

Conclusion

In the event of a mass casualty event involving chemical or biological terrorism, physicians of all specialties in the affected area and surrounding communities will be called upon to care for victims. In addition to physicians, physician organizations, hospitals and health systems should be part of the national and local response planning that is now being defined. To date, however, it appears that the involvement of medicine in these efforts has been limited to a few physicians and specialty societies.

Based on information that was presented at its February 1999, meeting, the CSA concludes that there are significant issues confronting physicians and the United States health system in the effort to prepare for nuclear, chemical, or biological terrorism. The AMA and organized medicine must define their role in this effort, and work to ensure that the unique perspectives of physicians are represented in plans to prevent or respond to this crucial threat to health.

RECOMMENDATIONS

The following statements, recommended by the Council on Scientific Affairs, were adopted by the AMA House of Delegates as AMA policy at the 1999 AMA Annual Meeting.

1. The AMA and the Federation of Medicine will work with appropriate public health, law enforcement, hospital, and emergency response agencies and associations, as well as the pharmaceutical industry and media to develop coordinated plans and strategies that identify the specific needs, roles, contributions, and participation of organized medicine and individual physicians in disaster planning and emergency response to terrorist attacks and identify procedures for the rapid detection, early reporting, and medical management of affected individuals.
2. The AMA and the Federation of Medicine will sponsor a planning conference on this topic immediately preceding the Interim 1999 AMA Meeting and invite all interested parties to help develop such plans and strategies, and that the plans developed from these efforts be reported back to the House of Delegates at the Annual 2000 AMA Meeting.
3. The AMA urges medical schools and residency programs to develop curricula and training programs for medical students and residents regarding medical and public health aspects of biological and chemical terrorism, as well as community disaster planning and emergency response procedures in the event of such terrorism.

Review of Guidelines for Pre-test and Post-test Education and Counseling of the National Society of Genetic Counselors (CSA Rep. 5, A-99)

SUMMARY

Objective. To review the Guidelines for Pre-test and Post-test Education and Genetic Counseling of the National Society of Genetic Counselors (NSGC) as well as those of other organizations.

Methods. Using two late-onset/adult-onset diseases, Huntington disease (HD) and the breast cancer genes 1 and 2 (*BRCA1* and *BRCA2*) as general models, the NSGC Position Paper on Predisposition Genetic Testing or Late-Onset Disorders in Adults is reviewed. A literature search was conducted using MEDLINE databases for English-language articles in the subject areas of genetic testing of adult-onset disease, predictive testing, Huntington disease, breast/ovarian cancer, and genetic testing. The World Wide Web was also accessed. Leading laboratories were contacted and research scientists were interviewed in reference to current laboratory protocol.

Data Synthesis. HD, a genetic disease with adult onset, was the first adult-onset disorder for which pre-symptomatic genetic testing became available, and an extensive literature exists on the experience with pre-symptomatic genetic testing. That knowledge along with experience with other complex disorders has helped inform the development of the NSGC guidelines. Clearly, these guidelines apply well to HD, which has a sensitive predictive test. Application of these guidelines is more difficult for the example of the hereditary breast and ovarian cancer genes, *BRCA1* and *BRCA2*. The availability of therapy is a crucial question for any adult-onset genetic disorder and affects the utility of any pre-symptomatic testing. There is no current therapy for HD in contrast to multimodal therapy that is available for breast and ovarian cancer. The diseases differ greatly in terms of the actual genes being tested. HD shows no genetic heterogeneity; all cases of HD are caused by mutations in a single gene. Familial breast cancer may be caused by a number of genes, some in which mutations increase susceptibility to disease as opposed to being a disease-causing gene. As more experience with the genetics of other adult-onset genetic diseases accumulates, it may become necessary to modify guidelines for testing.

Conclusions. The Council on Scientific Affairs recommends the adoption of the NSGC Guidelines with one caveat, that post-test protocols may differ depending on the nature of the disease and the available therapeutic/curative options.

RECOMMENDATION

The following statement, recommended by Council on Scientific Affairs, was adopted by the AMA House of Delegates as AMA policy at the 1999 AMA Annual Meeting.

The AMA urges adoption by the appropriate medical societies, federal agencies, and third-party payers of the National Society of Genetic Counselors guidelines, with the caveat that post-test protocols may differ depending on the nature of the disease and the available therapeutic/curative options.

Obesity as a Major Public Health Problem (CSA Rep. 6, A-99)

SUMMARY

Objective. To review the epidemiology and health implications of obesity and identify resources to assist physicians with its evaluation and management in children and adults.

Methods. MEDLINE searches for English-language articles published in the last 5 years revealed more than 9,000 articles on various aspects of obesity in children and adults. Considering this extensive database, the Council on Scientific Affairs determined that a thorough analysis of the obesity literature would be a considerable undertaking and would likely duplicate the efforts of other national organizations. A number of resources, including recent evidence-based federal guidelines, were identified to provide physicians with information on the identification, management, and treatment of obesity.

Results. Obesity is a complex multifactorial condition in which excess body fat may put a person at health risk. National data indicate that between one third and one half of US men and women aged 20 years and older are overweight (body mass index or BMI > 25.0 kg/m²); nearly one fourth are clinically obese (BMI > 30.0 kg/m²). Obesity in adults is associated with a variety of health risks including hypertension, cardiovascular disease, type 2 diabetes mellitus, and some cancers. Obese adults may also suffer psychological distress and social stigmatization. National data further indicate that approximately 14% of children and 12% of adolescents are overweight (BMI > the 95th percentile for age and sex). In children and adolescents, obesity has immediate health and psychosocial implications but a principal concern is that overweight and obesity acquired during childhood or adolescence may persist into adulthood and increase the risk for some chronic diseases later in life.

Conclusions. The prevalence of obesity in the United States is increasing in children and adults. Reversing these trends requires changes in individual behavior and the elimination of societal barriers to healthy lifestyle choices. Basic treatment of overweight and obese patients requires a comprehensive approach involving diet and nutrition, regular physical activity, and behavioral change with an emphasis on long-term weight management rather than short-term extreme weight reduction. Physicians can have an important role by promoting preventive measures and encouraging positive lifestyle behaviors, as well as by identifying and treating obesity-related comorbidities. Physicians also have a role in counseling patients about safe and effective weight loss and weight maintenance programs. BMI is significantly correlated with total body fat content and should be used to assess overweight and obesity as well as monitor changes in body weight. Abdominal fat content should be assessed before and during weight loss treatment by measurement of waist circumference.

Treatment is recommended for patients with a BMI of 25.0 kg/m² to 29.9 kg/m² or a high waist circumference, and 2 or more risk factors. Treatment is also recommended for patients with a BMI > 30 kg/m². Overweight persons without risk factors should be encouraged to avoid further weight gain. When determining treatment options, the presence of comorbidities should be considered as well as the patient's motivation to lose weight. General treatment goals are to reduce body weight, maintain a lower body weight over the long term, prevent further weight gain, and control accompanying disease risk factors.

RECOMMENDATIONS

Recognizing the public health importance of reducing overweight and obesity in children and adults and further recognizing the public's interest and investment in lifestyle changes aimed at achieving a healthy body weight, the following statements, recommended by the Council on

Scientific Affairs, were adopted by the AMA House of Delegates as AMA policy at the 1999 AMA Annual Meeting.

1. The AMA urges physicians as well as managed care organizations and other third-party payors to recognize obesity as a complex disorder involving appetite regulation and energy metabolism that is associated with a variety of comorbid conditions.
2. The AMA will work with appropriate federal agencies, medical specialty societies, and public health organizations to educate physicians about the prevention and management of overweight and obesity in children and adults, including education in basic principles and practices of physical activity and nutrition counseling; such training should be included in undergraduate and graduate medical education and through accredited continuing medical education programs.
3. The AMA urges federal support of research to determine (a) the causes and mechanisms of overweight and obesity, including biological, social, and epidemiological influences on weight gain, weight loss, and weight maintenance; (b) the long-term safety and efficacy of voluntary weight maintenance and weight loss practices and therapies, including surgery; (c) effective interventions to prevent obesity in children and adults; and (d) the effectiveness of weight loss counseling by physicians.
4. The AMA encourages national efforts to educate the public about the health risks of being overweight and obese and provide information about how to achieve and maintain a preferred healthy weight.
5. The AMA urges physicians to assess their patients for overweight and obesity during routine medical examinations and discuss with at-risk patients the health consequences of further weight gain; if treatment is indicated, physicians should encourage and facilitate weight maintenance or reduction efforts in their patients or refer them to a physician with special interest and expertise in the clinical management of obesity.
6. The AMA urges all physicians and patients to maintain a desired weight and prevent inappropriate weight gain.
7. The AMA encourages physicians to become knowledgeable of community resources and referral services that can assist with the management of overweight and obese patients.
8. The AMA urges the appropriate federal agencies to work with organized medicine and the health insurance industry to develop coding and payment mechanisms for the evaluation and management of obesity.

NOTE: A revised version of this report has been published: Lyznicki JM, Young DC, Riggs JA, Davis RM, for the Council on Scientific Affairs. Obesity: assessment and management in primary care. *Am Fam Physician*. 2001;63:2185-2196. (June 1)

Cloning and Embryo Research (CSA Rep. 7, A-99)

SUMMARY

Objective. This report summarizes the scientific basis of cloning and describes the potential risks and benefits of this technology for clinical medicine and biomedical research.

Methods. The report of the National Bioethics Commission, "Human Beings," was reviewed. A literature search was conducted using MEDLINE databases for English-language articles in the subject areas of cloning, somatic cell nuclear transfer, embryonic stem cell research, and in utero gene therapy to summarize the most recent scientific information. The World Wide Web was also searched.

Data Synthesis. A number of scientific uncertainties remain regarding somatic cell nuclear transfer as a cloning technique and its feasibility in human beings, particularly the safety of the technique. The potential uses of somatic cell technology in animals and humans are explored. The use of this technology in humans is fraught with fears and controversy. Public and scientific concerns regarding cloning are discussed. In this discussion, it is presumed that the safety issues raised will eventually be alleviated. Psychological, philosophical and religious concerns in addition to the safety of the technology need to be confronted. Public input, including that of the scientific community, must be sought to develop a consensus that informs future legislation.

The major issue for regulatory public policy is discussed in detail in the context of potential legislation that has been introduced. The broader issue of individual rights as interpreted by ethical and constitutional scholars is dealt with in a companion report from the Council on Ethical and Judicial Affairs, *The Ethics of Human Cloning (A-99)*.

Conclusions. The Council on Scientific Affairs recommends AMA support of the recommendations of the National Bioethics Advisory Commission report, "Human Beings," and ongoing research and oversight on this issue.

RECOMMENDATIONS

The following statements, recommended by the Council on Scientific Affairs, were adopted by the AMA House of Delegates as AMA policy at the 1999 AMA Annual Meeting.

1. The AMA supports efforts to convene a conference of scientists, physicians, bioethicists, and other relevant experts to develop consensus on the scientific and bioethical issues raised by somatic cell nuclear transfer technology.
2. The AMA will promote efforts to maintain the 5-year moratorium on the cloning of human beings and prevent efforts to restrict current and future biomedical research unduly.
3. The AMA supports efforts to develop an oversight mechanism similar to the Recombinant DNA Research Advisory Committee, affiliated with the National Institutes of Health, to review all human cloning experiments.
4. The AMA supports efforts to establish a program for promoting the public understanding of science, and the understanding of social and philosophical issues by scientists.

Review of AMA Recommendations on Folic Acid Supplementation (CSA Rep. 8, A-99)

SUMMARY

This report updates Council on Scientific Affairs (CSA) Report 5 (I-95), "Folic Acid Relationship to Spinal Closure Birth Defects and Adult Vascular Disease," and reviews the revised recommendations on Dietary Reference Intakes, especially for dietary folate and supplemental folic acid, issued by the Institute of Medicine Food and Nutrition Board. The report addresses folic acid and neural tube defects; the relationship of folic acid, vitamins B₆, B₁₂, and homocysteine; folic acid and vitamin B₁₂ deficiency; potential risk factors for cardiovascular and Alzheimer's disease; and folate and colorectal cancer; and summarizes current concepts in nutritional recommendations.

RECOMMENDATIONS

The following statements, recommended by the Council on Scientific Affairs, were adopted by the AMA House of Delegates as AMA policy at the 1999 AMA Annual Meeting.

1. The AMA encourages the Centers for Disease Control and Prevention (CDC) to continue to conduct surveys to monitor nutritional intake and the incidence of neural tube defects (NTD).
2. The AMA continues to encourage broad-based public educational programs about the need for women of child-bearing potential to consume adequate folic acid through nutrition, food fortification, and vitamin supplementation to reduce the risk of NTD.
3. The AMA encourages the CDC and the National Institutes of Health to fund basic and epidemiological studies and clinical trials to determine causal and metabolic relationships among homocysteine, vitamins B₁₂ and B₆, and folic acid, so as to reduce the risks for and incidence of associated diseases and deficiency states.
4. The AMA encourages research efforts to identify and monitor those populations potentially at risk for masking vitamin B₁₂ deficiency through routine folic acid supplementation of enriched food products.
5. The AMA urges the Food and Drug Administration to increase folic acid fortification to 350 µg per 100 g of enriched cereal grain.
6. The AMA encourages the FDA to require food, food supplement, and vitamin labeling to specify milligram content, as well as RDA levels, for critical nutrients, which vary by age, gender, and hormonal status (including anticipated pregnancy).

Effects of Work on Pregnancy (CSA Rep. 9, A-99)

SUMMARY

Objective. To update the 1983 Council on Scientific Affairs (CSA) report, "Effects of Pregnancy on Work Performance."

Methods. Literature searches were conducted in the MEDLINE database for English-language articles from 1980 through May 1998 using the search terms *occupational exposure*, *paternal and maternal exposure*, *adverse outcomes*, and *pregnancy*. Additional articles were derived by manual review of references listed in pertinent publications and from consultation with experts.

Findings. Risk assessment to identify which occupational activities or exposures may be detrimental requires detailed knowledge about the agent, activity, duration of exposure, pregnancy status, home activities and health status of the woman. Each individual and situation is unique and should be evaluated as such. Current research indicates that occupational exposure to select agents such as lead and mercury, organic solvents, and certain occupational infections (hepatitis, human immunodeficiency virus, toxoplasmosis-rubella-cytomegalovirus-herpes) may produce adverse reproductive outcomes. Physical activities at work, such as prolonged standing, bending, or shift work, pose the greatest hazard when present in combination and in circumstances where women have limited opportunity for rest. Most work during pregnancy does not pose a hazard to the mother or the fetus.

Conclusion. Physicians need to consider the potential benefits and risk of occupational activities and exposures on an individual basis and work with patients and employers to define a healthy working environment for pregnant women. A recommendation that a pregnant woman not perform a particular activity should not be made without serious consideration of the potential health consequences of working versus the hazards of not working. Physicians can encourage employers to accommodate women's increased physical requirements during pregnancy. These include modifications in the work schedule to accommodate breaks every few hours, with a longer "meal" break every 4 hours; encouraging adequate hydration; regularly varying work positions with sitting, standing, and walking; and minimizing heavy lifting, especially if associated with bending.

RECOMMENDATIONS

The following statements, recommended by the Council on Scientific Affairs, were adopted by the AMA House of Delegates as AMA policy at the 1999 AMA Annual Meeting.

1. The AMA supports the right of employees to work in safe workplaces that do not endanger their reproductive health or that of their unborn children.
2. The AMA supports workplace policies that minimize the risk of excessive exposure to toxins with known reproductive hazards irrespective of gender or age.
3. The AMA encourages physicians to consider the potential benefits and risks of occupational activities and exposures on an individual basis and work with patients and employers to define a healthy working environment for pregnant women.
4. The AMA encourages employers to accommodate women's increased physical requirements during pregnancy; recommended accommodations include varied work positions, adequate rest and meal breaks, access to regular hydration, and minimizing heavy lifting.
5. The AMA acknowledges that future research done by interdisciplinary study groups composed of obstetricians/gynecologists, occupational medicine specialists, pediatricians, and representatives from industry can best identify adverse reproductive exposures and appropriate accommodations.

Seclusion and Restraint of Children and Adolescents (CSA Rep. 10, A-99)

SUMMARY

Resolution 509, introduced by the American Academy of Child and Adolescent Psychiatry and the American Psychiatric Association, was adopted at the 1998 AMA Annual Meeting. The resolution asked "That our American Medical Association (AMA) Board of Trustees work in conjunction with state and local medical societies and all appropriate specialty organizations to review existing seclusion and restraint guidelines and coordinate the development of updated national guidelines for the safe and clinically appropriate use of seclusion and restraint techniques with children and adolescents."

There are relatively few empirical studies on the use of seclusion and restraint with children and adolescents. Restraints employed during diagnostic or treatment procedures (eg, restraining an arm while administering intravenous medication) and chemical restraints are not discussed in this report as they are outside the scope of the resolution.

Restraints include mechanical devices such as camisoles, restraining sheets, leather restraints and chairs that restrict or confine movement, and most such devices can be adjusted to allow greater or lesser movement. Seclusion encompasses those actions that confine a patient to a defined area, usually a room, for a given time, although the actions that constitute seclusion may vary widely and are oftentimes defined by state law.

The most readily accepted indication for the use of restraint and seclusion is the prevention of harm to oneself or others, usually when the danger is imminent and after other measures have proven ineffective. Contraindications, or in some cases prohibitions, include use as punishment, as a convenience to or substitute for staff, as a substitute for individualized treatment, or as a disciplinary device.

The extent of use of seclusion and restraint among children and adolescents is unclear, and usage varies among the states because of state laws and regulations. Some states, for example, do not allow the use of seclusion with minors. A number of empirical studies have found that the use of seclusion and restraint is correlated with facility and patient characteristics.

This report recounts relevant AMA policy; relevant guidelines and policy of the American Psychiatric Association, the Joint Commission on Accreditation of Healthcare Organizations (JCAHO), and the American Academy of Pediatrics; the Health Care Financing Administration's (HCFA) proposed rule (§482.10), which includes a standard on seclusion and restraint; and the recently amended policy of the National Alliance for the Mentally Ill (NAMI), which states that "the use of involuntary mechanical or human restraints or involuntary seclusion is only justified as an emergency safety measure in response to imminent danger to one's self or others [and] can be justified only so long as the individual cannot commit to the safety of themselves and others." NAMI has called for the federal government to investigate the use of seclusion and physical restraints across the country and has called upon both HCFA and the JCAHO to more fully define their policies and standards.

RECOMMENDATIONS

The following statements, recommended by the Council on Scientific Affairs, were adopted by the AMA House of Delegates as AMA policy at the 1999 AMA Annual Meeting.

1. The AMA encourages and supports the development and use of guidelines on the use of seclusion and restraint with children and adolescents by appropriate medical specialty groups, including the American Academy of Child and Adolescent Psychiatry, the American Academy of Pediatrics, and the American Psychiatric Association; and

Summaries and Recommendations of Council on Scientific Affairs Reports
1999 AMA Annual Meeting – page 16

2. The AMA encourages empirical studies of the effects of seclusion and restraint on child and adolescent patients in all settings; and
3. The AMA will monitor the development and implementation of standards, rules, or guidelines on the use of seclusion and restraint, particularly as they may apply to children and adolescents, with reports back as necessary.

NOTE: The full text of this report has been published. Brown RL, Genel M, Riggs JA, for the Council on Scientific Affairs. Use of seclusion and restraint in children and adolescents. *Arch Pediatr Adolesc Med.* 2000;154:653-656. (July)

Opioids in Chronic Nonmalignant Pain (CSA Rep. 11, A-99)

SUMMARY

Objective. To review issues surrounding the use of opioid analgesics in the treatment of patients with chronic, noncancer pain and recommend approaches to improve the legal practice environment for physicians who appropriately prescribe these substances.

Methods. English-language reports on studies using human subjects were selected from a MEDLINE search of the literature from 1966 to 1998 using the MeSH headings *analgesics*, *opioid*; *pain*; and *chronic disease*, but excluding *neoplasm*. A total of 237 articles were retrieved for analysis. Additional articles were identified by manual review of the references cited in these publications. Further information was obtained from the World Wide Web sites of the American Pain Society, American Academy of Pain Medicine, American Academy of Pain Management, American Academy of Addiction Medicine, and the Pain and Policy Studies Group, and from recently published textbooks.

Results. Peripheral tissue or nerve damage has central consequences that may lead to long-term changes that may ultimately cause persistent pain in the absence of an ongoing stimulus. Published data indicate that therapy with opioids is beneficial in the treatment of selected patients with chronic noncancer pain. A substantial number of patients entering rehabilitation-oriented interdisciplinary pain clinics are taking opioids. Many of these patients can be withdrawn from opioids and some experience significant improvement after such withdrawal.

Patients with well-defined nociceptive pain are most responsive to opioid analgesics. Patients with neuropathic and central pain are less responsive, but a small subgroup exhibits well-defined analgesic responses. Those patients whose pain syndrome is psychologically maintained are generally not responsive to opioids. The development of tolerance and physical dependence is a predictable consequence and does not limit therapy in most patients. The risk of addiction or drug abuse is increased by current or past history of substance abuse, but appears to be infrequent in other patients. Barriers to prescription of opioid analgesics to patients with chronic noncancer pain still exist, including physicians' fear of regulatory scrutiny and legal sanctions.

Conclusions. A subgroup of patients with chronic noncancer pain benefit from long-term opioid therapy. Although selection criteria have not been adequately validated, these patients usually have an identifiable cause for their pain. Generally, they have not responded to other analgesics or techniques of pain management or they may receive additional benefit from the adjunctive use of opioids. These patients experience reduction in pain and either demonstrate functional improvement or are functionally stable on opioid therapy. Patients in the latter category exhibit reduced function and increased suffering when opioids are tapered or discontinued.

Several guidelines have been offered to encourage the appropriate use of opioids in patients with chronic noncancer pain. However, no definitive conclusions can be drawn from the results of published studies to endorse specific treatment guidelines on opioid therapy for chronic noncancer pain. Additional controlled data are necessary to identify patient characteristics predictive of response to opioid analgesics.

RECOMMENDATIONS

The following statements, recommended by the Council on Scientific Affairs, were adopted by the AMA House of Delegates as AMA policy at the 1999 AMA Annual Meeting.

1. Further controlled trials should be conducted on opioid therapy in patients with chronic noncancer pain in an effort to: (a) identify best practice with regard to selection of both

- medication and treatment regimens; (b) identify patient characteristics that predict opioid responsiveness; and (c) provide support for guidelines on appropriate precautions, contraindications, and the degree of monitoring required in such patients.
2. The AMA encourages states to create multidisciplinary task forces or pain commissions to study the barriers to pain management in their state, and to make and implement recommendations for policy that will create a practice environment conducive to effective pain management. Guidelines promulgated by medical boards are preferable to regulation or statutes.
 3. The AMA and relevant specialty societies will promote educational offerings for physicians to facilitate learning about principles of pain diagnosis and treatment.
 4. The AMA encourages appropriate education in pain evaluation and management to be provided as an integral part of the core curriculum at all medical schools.

NOTE: A revised version of this report has been published: Dickinson BD, Altman RD, Nielsen NH, Williams MA, for the Council on Scientific Affairs. Use of opioids to treat chronic, noncancer pain. *West J Med.*2000;172:107-115.

Reduction of the Medical and Public Health Consequences of Drug Abuse (CSA Rep. 12, A-99)

SUMMARY

Objective. To update the House of Delegates on additional research relevant to and called for by American Medical Association (AMA) Policy H-95.954. This report ascertains whether the scientific literature continues to support existing AMA policy in support of methadone maintenance therapy (MMT) and syringe exchange programs (SEPs).

Methods. Relevant findings of CSA Report 8 (A-97), "The Reduction of Medical and Public Health Consequences of Drug Abuse," are incorporated. In addition, the following databases and Web sites were searched for relevant English-language articles and government reports from 1988 to 1997: CATLINE (on-line book catalog of the National Library of Medicine); MEDLINE; AIDSLINE; HealthSTAR; the Center for Substance Abuse Prevention; PREVLine/National Clearinghouse for Alcohol and Drug Information; NIH Consensus Development Program; Drug Abuse Treatment Outcome Study (DATOS); the Lindesmith Center/Schaeffer Drug Library; and the NLM Current Bibliographies in Medicine: "Effective Medical Treatment of Heroin Addiction." Selected literature from individual AMA members and state medical societies also was reviewed.

Results. Extensive evaluation studies show that MMT reduces heroin use and many associated problems in a cost-effective manner, without negative public health impact. MMT availability has been limited by inadequate funding and understanding of the research, extensive regulation, and limits on the freedom of physicians to provide therapeutic doses of methadone in a variety of medical settings. Only about 115,000 of an estimated 600,000 opioid-dependent persons participate in MMT. Participation is often discouraged by subtherapeutic duration and level of treatment, inadequate dosing levels, and requirements for total abstinence as the primary goal. The role of physicians in MMT is governed by extensive regulatory supervision, a decreasing role of medicine in the provision of existing MMT services, and a lack of familiarity with MMT by physicians. Broad-based medical, public health, and scientific support exists for expansion of MMT but with greater emphasis on services consistency and quality, and provision of ancillary services.

Sterile needles and syringes legally provided through SEPs, free distribution, and legal pharmacy sales reduce injection drug use and prevent the spread of bloodborne pathogens. Research consistently shows positive health and social outcomes and indicates the need and medical justifications for legalizing and promoting the availability of sterile needles and syringes. Access levels that approach availability of sterile equipment for each injection occasion for each injecting drug user appear necessary to achieve the full benefits of SEPs to prevent the spread of bloodborne pathogens. Drug abuse treatment and other services are important components of SEP strategy.

Conclusions. The data fully support existing AMA policy and activities to increase the availability of drug treatment, including MMT, and to obtain full federal support for SEPs and other activities to provide sterile drug injecting equipment. Neither MMT nor SEPs increase existing drug use and there is no evidence that drug use begins as a result of participation in these programs. Both strategies reduce illicit drug use and injecting drug use, and the harmful medical and social side effects of that use, and both are effective preventive measures against bloodborne pathogens. The scientific literature continues to support assertions that drug abuse issues ought to be treated primarily as medical and public health rather than criminal justice issues. The effectiveness of both strategies warrants increased support for services, an easing of federal and state restrictions governing their availability, and advocacy in their support.

RECOMMENDATIONS

The following statements, recommended by the Council on Scientific Affairs, were adopted by the AMA House of Delegates as AMA policy at the 1999 AMA Annual Meeting.

1. The AMA reaffirms its recognition of the proven public health benefits of needle- and syringe-exchange programs in reducing the transmission of HIV and other bloodborne pathogens (AMA Policy H-95.958) and encourages the United States Secretary of Health and Human Services and the Congress to permit the use of federal funds for needle- and syringe-exchange programs.
2. The AMA reaffirms its recognition of the proven public and patient health benefits of methadone maintenance and other similar opioid replacement programs in reducing the use of heroin, related crime, and the use of contaminated needles and syringes, which lead to transmission of HIV and other bloodborne pathogens (AMA Policies H-20.977, H-95.954, and H-95.959); and (a) encourages Congress to expand the funding and availability of methadone maintenance and other heroin replacement treatments; (b) supports the funding and consistent provision of mental health and other services indicated for successful recovery of patients in such programs; and (c) recommends that methadone maintenance treatment funding and certification include measures to improve the consistency and medical effectiveness of all such services.
3. The AMA reaffirms Policies H-20.977, H-95.957, H-95.964, and H-95.977, which recognize the effectiveness and appropriateness of physician provision of methadone maintenance therapy; therefore, the AMA will request the United States Secretary of Health and Human Services and other appropriate regulatory and legislative bodies to amend their methadone treatment certification processes so as to: (a) increase the availability of physician training and provision of services; (b) allow for physician determined patient maintenance dosage levels; and (c) encourage physician provided methadone services in a broad array of medical settings.
4. The AMA encourages state medical societies to advocate for the expansion of and increased funding for needle- and syringe-exchange programs and methadone maintenance treatment services and programs in their states.

NOTE: The full text of this report has been published: Yoast R, Williams MA, Deitchman SC, Champion HC. Report of the Council on Scientific Affairs: Methadone maintenance and needle-exchange programs to reduce the medical and public health consequences of drug abuse. *J Addict Dis.* 2001;20:15-40. (April/May)

CSA Rep. 13, A-99 *Deferred Report*

CSA Rep. 14, A-99 *Deferred Report*

Implications of Brain Development Research (CSA Rep. 15, A-99)

SUMMARY

Resolution 517, introduced by the Mississippi Delegation, and Resolution 520, introduced by the American Association of Public Health Physicians, were referred to the Board of Trustees at the 1998 AMA Annual Meeting. Resolution 517 asked the AMA to "undertake a comprehensive review of recent research on brain development and learning in order to provide a uniform body of knowledge summarizing the implications [of] this research on the practice of medicine, the development of public health policy, and the development of comprehensive school health education." Resolution 520 asked the AMA "to undertake a comprehensive review of the recent research on the development of the brain in order to (1) provide a uniform body of knowledge; and (2) consider the implications of the application of the results of this research on (a) the practice of medicine and public health; and (b) the development of public health and social policy on a national level."

The report summarizes the key neurodevelopmental processes that are thought to be linked to learning; reviews some of the environmental factors known to adversely affect cognition and/or behavior; and discuss the linkages between these factors and neurodevelopmental steps and addresses policy implications based on these linkages.

At this time, the scientific findings in human neurodevelopment remain too preliminary to offer clinical or policy recommendations beyond those that already follow from other research. The Council on Scientific Affairs will continue to follow this important field of study and make additional recommendations as data to support them become available.

RECOMMENDATIONS

The following statements, recommended by the Council on Scientific Affairs, were adopted by the AMA House of Delegates as AMA policy at the 1999 AMA Annual Meeting:

1. The AMA supports the efforts of the National Institutes of Health (NIH) and others to encourage and fund research into basic human brain development processes and the relationship of these processes to cognitive development
2. The AMA supports the efforts of the NIH and others to encourage and fund research exploring the relationships among brain development, environmental factors, and cognitive and behavioral disorders and to seek effective mechanisms to prevent and treat these disorders.

Mammographic Screening for Asymptomatic Women (CSA Rep. 16, A-99)

SUMMARY

At its 1988 Annual Meeting, the American Medical Association (AMA) adopted Report F of the Council on Scientific Affairs (CSA), "Mammographic Screening in Asymptomatic Women Aged 40 Years and Older." The recommendations in this report were adopted as Policy H-525.993 (*AMA Policy Compendium*), which was reaffirmed at the 1994 Annual House of Delegates meeting. This policy calls for annual mammography screening and clinical breast examination for all women, beginning at age 50 years. Citing the uncertainty on this subject, this policy also called for screening mammography and clinical breast examinations for women aged 40 to 49 years every one to two years. Policy 525.993 also called for periodic reconsideration of those recommendations, as more epidemiological and cost data become available.

Discussion

Counseling an individual patient based on the results of population-based studies always involves some judgment about the circumstances of that particular patient (taking into account family history and other associated disease risk, eg, age at first pregnancy). General recommendations of medical societies and the National Institutes of Health can provide assistance in cases where the epidemiological evidence is clear. Current epidemiological evidence now demonstrates the efficacy of mammography screening for detecting cancer in women in their 40s.¹⁻⁴ Cost effectiveness of screening mammography has been found to be within the range of other diagnostic procedures when expressed as marginal cost per year of life saved.⁹

RECOMMENDATIONS

The following statements, recommended by the Council on Scientific Affairs, were adopted by the AMA House of Delegates as AMA policy at the 1999 AMA Annual Meeting.

1. AMA Policy 525.993 is amended to state: "(1) The AMA favors participation in and support of the efforts of the professional, voluntary, and government organizations to educate physicians and the public regarding the value of screening mammography in reducing breast cancer mortality. (2) The AMA advocates remaining alert to new epidemiological findings regarding age-specific breast cancer mortality reduction following mammography screening. (3) Based on recent summary data the AMA recommends annual screening mammograms and continuation of clinical breast examinations in asymptomatic women 40 years and older. (4) The AMA encourages the periodic reconsideration of these recommendations as more epidemiological data becomes available. (5) The AMA supports seeking common recommendations with other organizations. (6) The AMA reiterates its longstanding position that all medical care decisions should occur only after thoughtful deliberation between patients and physicians."
2. AMA Policy 525.982 ("The AMA supports continued efforts to develop a multicenter breast screening trial to determine the optimal mammographic screening interval for women ages 40-49.") is rescinded.

Publications Policy of the Council on Scientific Affairs (CSA Rep. 17, A-99)

NOTE: The full-text of this report is given below.

At its February 1999 meeting, the Council on Scientific Affairs (CSA) of the American Medical Association (AMA) adopted a new policy and set of procedures for developing and disseminating its reports. The CSA wished to formalize the processes by which it writes its reports to the House of Delegates (HOD), utilizes expertise available in the HOD, and disseminates its reports. In this informational report, the CSA describes this policy.

Statement of Principles:

The CSA prepares reports on diverse topics of medical science by priorities consistent with the AMA Mission, Vision, and Strategic Plan and in accordance with available resources. These reports may be developed by request of the HOD, the Board of Trustees, other Councils, or under the CSA's own initiative. When CSA reports are approved by the HOD, the CSA makes them available to a wider audience through electronic or printed publication.

1. Audience and dissemination

The primary audience for CSA reports is the HOD. Following approval by the House, reports may be disseminated more widely. Planning for such dissemination will begin when the CSA begins to plan a new report. Options include:

- publication in a peer-reviewed journal
- publication in a journal that is not peer-reviewed
- dissemination in an AMA report
- publication on the CSA's World Wide Web site

If the CSA chooses publication in a peer-reviewed journal, the Council staff and liaisons will recommend appropriate journals. Once a report has been prepared, however, the CSA may change the venue of distribution.

2. Liaisons

Each CSA report will be assigned to at least one member of the AMA science staff, and at least one Council member will serve as liaison. Liaisons provide staff with guidance regarding report content, resources, and peer reviewers. Liaisons are assigned based on designated preferences of CSA members, taking into account Council members' existing assignments and expertise. Recommended liaison assignments will be submitted for approval by the CSA Executive Committee. The liaisons and staff will determine the length and format of the report.

3. Length and structure of reports

Each report will be written in a format appropriate to its intended dissemination. Reports to be submitted for journal publication will be written in the format specified by that journal. CSA reports are intended to be concise, and should neither be an exhaustive review of the literature, nor superficial. This will allow staff to work more efficiently, will place less of a burden on the reader, and make acceptance for publication more likely. All reports, regardless of length, must include essential details such as a description of methods used to review the literature.

4. Specialty and Service Societies

The Specialty and Service Societies (SSS) have important expertise that the CSA can call upon when developing its reports. The CSA will rely upon the SSS to determine which component societies or their representatives are best suited to work with the Council on a given report. The CSA proposes this mechanism: CSA staff will notify the AMA staff liaison to SSS of the report topic (including a copy of the HOD action, if any). The AMA staff liaison to SSS will solicit and coordinate responses of interest from SSS members. CSA staff will determine with the SSS staff liaison a specific deadline for receiving these responses. CSA members and staff will decide how to best utilize the efforts of responding SSS members; possible roles include:

- recommending expert authors or reviewers
- discussing plans for disseminating reports
- collaborating with the CSA to present reports at HOD meetings.

5. Other stakeholders

The CSA's reports and recommendations often impact parties in the Federation as well as other groups and organizations. These may include professional associations, trade or manufacturing associations, regulators, or others. When appropriate, the CSA may invite these parties to participate in the preparation, review, or dissemination of CSA reports. However, the diversity of these stakeholders precludes developing a single policy for involving them. CSA staff and Council members assigned to each report will determine which other stakeholders should be approached, and choose an appropriate mechanism.

6. "Fast track" bulletins

At times the CSA may wish to inform the Federation about critically important new information. The subjects for "fast track" bulletins may be suggested by CSA members, staff, the Board of Trustees, or other interested parties. A subcommittee of the CSA will screen suggestions and review the fast track reports prior to development or dissemination. The subjects may include descriptions of new medications, current topics about which physicians are likely to be asked (for example, widely publicized treatments), or other subjects identified by the CSA. Fast track bulletins (information statements) on these topics will be developed by CSA staff and at least one Council member. In contrast to reports, which are considered by the CSA at its meetings, draft fast track bulletins will be informational only and will be disseminated to CSA members by electronic mail and FAX with a deadline for response of no less than 2 weeks. Following revision and approval by the CSA liaison, the fast track bulletin will be published on the CSA's Web page. The bulletin should include appropriate links to other Web sites (e.g., for a bulletin describing a new drug, appropriate links might include the Food and Drug Administration or the drug manufacturer). Such links should be accompanied with a suitable disclaimer, as the CSA cannot warrant the accuracy of information on other Web sites.

7. Web publications

The CSA can publish its reports and fast track bulletins on its Web pages on the AMA Web site. Web publication allows rapid dissemination to a large audience (although only peer-reviewed journal publication results in an Index Medicus citation that will appear in literature searches). Most peer-reviewed journals regard Web publication as "prior publication" and will not consider Web-published documents for journal publication. The following guidelines for choosing Web publication will be utilized:

- fast-track reports
- reports that the CSA chooses not to submit for journal publication
- reports not accepted for journal publication

- other reports selected by the Council

When the HOD approves a CSA report that the Council wishes to submit for publication in a peer-reviewed journal, the CSA will write an abstract that can be presented on the CSA Web site until the full report is published.

Chemoprophylaxis for Health Care Workers and Medical Students (CSA Rep. 18, A-99)

SUMMARY

Objective. To address the current Occupational Safety and Health Administration (OSHA) standard for post-exposure prophylaxis for health care workers (HCWs), including medical students, occupationally exposed to human immunodeficiency virus (HIV), hepatitis B virus (HBV), and hepatitis C virus (HCV).

Methods. The MEDLINE and PREMEDLINE databases were searched for English-language articles from 1980 to 1998 with *health care workers* as the primary subject. This search was refined further using the search terms *post-exposure prophylaxis*, *chemoprophylaxis*, *treatment*, or *prophylaxis*, in combination with either *hepatitis B (HBV)*, *hepatitis C (HCV)*, or *human immunodeficiency virus (HIV)*. The bibliography of retrieved articles that provided information on the post-exposure prophylaxis for HBV, HCV or HIV was reviewed for other relevant English-language articles that may have been excluded by the literature search. The World Wide Web was searched for information using the search concepts *HIV post-exposure prophylaxis*, *hepatitis B post-exposure prophylaxis*, and *hepatitis C post-exposure prophylaxis*. Telephone communications with OSHA provided further information.

Results. HCWs are at risk for occupational infection with HIV, HBV, and HCV, although these bloodborne pathogens vary greatly in transmissibility from the patient to the HCW. Guidelines exist for post-exposure prophylaxis (PEP) after occupational exposure to HIV or HBV. At this time there are no recommendations for post-exposure prophylaxis after exposure to HCV. PEP for HIV in particular should be administered as soon as possible. The language of the OSHA Bloodborne Pathogens Standard is general and encompasses current recommendations for PEP. Although medical students are not covered by the provisions of the OSHA Bloodborne Pathogens Standard, hospitals and medical schools must ensure that medical students have the same timely access to counseling and treatment by experienced practitioners as do paid employees after an occupational exposure to bloodborne pathogens.

Resources are available to help physicians provide counseling and therapy according to current guidelines. However, PEP has limitations due to its cost, the associated side effects, and the occurrence of therapeutic failures, and it should not be the primary strategy for dealing with occupational exposures. Technologies exist to reduce the risk of occupational exposures to bloodborne pathogens by using safer medical devices.

Conclusions. Health care employers whose employees are at risk for occupational exposure to bloodborne pathogens should ensure that timely post-exposure counseling and prophylaxis, in accordance with relevant Public Health Services guidelines, are available to HCWs, including students, after an exposure. Medical schools and hospitals need to develop payment systems for post-exposure chemoprophylaxis for students exposed to bloodborne pathogens in the course of their studies and training. A payment mechanism must be instituted to cover all necessary expenses of counseling, testing, and therapy for exposed HCWs, including students exposed while in clinical training. Health care employers whose employees are at risk for occupational exposure to bloodborne pathogens need to evaluate and make use of appropriate techniques and technologies, including safer medical devices, to prevent occupational exposure to bloodborne pathogens.

RECOMMENDATIONS

The following statements, recommended by the Council on Scientific Affairs, were adopted by the AMA House of Delegates as AMA policy at the 1999 AMA Annual Meeting:

1. The AMA reaffirms existing AMA Policies H-440.958 and H-185.970, which call for universal immunization, including medical students, for hepatitis B and health insurance coverage for hepatitis B immunization.
2. The AMA recommends that health care employers whose employees, or students receiving training, are at risk for occupational exposure to bloodborne pathogens ensure that timely post-exposure counseling and prophylaxis, in accordance with relevant Public Health Services guidelines, are available to health care workers, including students, after an exposure.
3. The AMA recommends that medical schools and other health professions schools develop payment systems for post-exposure chemoprophylaxis for students exposed to bloodborne pathogens in the course of their studies and training; a payment mechanism must be instituted to cover all necessary expenses of counseling, testing, and therapy for exposed health care workers, including students exposed while in clinical training.
4. The AMA recommends that health care employers whose employees are at risk for occupational exposure to bloodborne pathogens evaluate and make use of appropriate techniques and technologies, including safer medical devices, to prevent occupational exposure to bloodborne pathogens.

In-line Skating (CSA Rep. 19, A-99)

SUMMARY

Resolution 404, introduced by the Young Physicians Section at the 1997 Interim Meeting and referred to the Board of Trustees, asked: "That the American Medical Association (AMA) work with the Federation to encourage state and local governments to adopt legislation requiring that children use appropriate safety gear when in-line skating and skateboarding."

In-line skating is a fast-growing sport. Along with the increase in participants, there is an increase in injuries. Children are the largest group of participants injured in in-line skating. Retrospective studies show that in-line skaters who wear protective gear have fewer injuries. Existing AMA policy encourages the use of protective equipment, including wrist guards, kneepads, elbow pads, and helmets. (AMA Policy H-10.975 also encourages skating safety education, encourages that safety equipment be available where in-line skates are purchased or rented, and encourages the design and manufacture of appropriate safety equipment.)

Several in-line skating researchers have decried the lack of prospective studies on the effectiveness of in-line skating protective equipment. Such data would assist legislators to determine the most appropriate actions to protect in-line skaters. Increased public awareness of in-line skating safety and education of in-line skaters on the value of protective equipment remain appropriate. Protective equipment that is easier to use, less cumbersome to wear, and that affords maximal protection might also enhance public acceptance and use of this gear.

The AMA can assist in raising public awareness of in-line skating protective equipment. Physicians and hospitals as well as sporting goods stores, manufacturers, and the media, can increase public awareness about safety issues regarding in-line skating. As health advocates, physicians have a key role in raising awareness because of their role in counseling patients and in the community.

RECOMMENDATIONS

The following statements, recommended by the Council on Scientific Affairs, were adopted by the AMA House of Delegates as AMA policy at the 1999 AMA Annual Meeting.

1. The AMA reaffirms existing Policy H-10.975,
2. The AMA encourages federal agencies and industries to support research on patterns of equipment use and frequency of protective equipment use for in-line skating.
3. The AMA will work with the Consumer Product Safety Commission, Centers for Disease Control and Prevention, national in-line skating organizations, and medical specialty societies, Alliance and Federation to encourage in-line skaters to wear protective equipment.
4. The AMA encourages physicians to counsel patients, and their parents when appropriate, that full protective equipment should be worn and appropriate safety measures be taken to prevent in-line skating injuries. Consistent with recommendations of the American Academy of Pediatrics, prevention efforts should include the following: (a) Full protective gear should be worn at all times. This would include wrist guards, elbow pads, kneepads, and a helmet. The helmet should be certified by the ASTM, the ANSI or the Snell Foundation. (b) Unsafe activities such as hitching or truck surfing, which is latching onto a moving vehicle, should be avoided. (c) Training for beginners should be encouraged, and novice skaters should start in an indoor or outdoor rink rather than on the street. (d) Skaters should not skate in the dark and should learn to look for road debris or defects that could cause them to lose their balance. (e) Skaters, especially

- children with balance problems, physical disabilities, or uncorrected vision or hearing problems who skate should do so in a rink or another protected place.
5. The AMA encourages medical specialty societies and state and local medical societies to advocate for state and local legislation to improve the safety of in-line skating through:
 - the use of appropriate protective equipment (especially helmets);
 - the designation of protected areas for in-line skating;
 - prohibitions against hitching a ride behind a moving vehicle;
 - the assurance that protective equipment is available at skating rental shops;
and
 - the provision of training and educational materials; such legislation should include a surveillance component to monitor compliance.