ICSI

Institute for Clinical Systems Improvement

Health Care Guideline

The information contained in this *ICSI Health Care Guideline* is intended primarily for health professionals and the following expert audiences:

- physicians, nurses, and other health care professional and provider organizations;
- health plans, health systems, health care organizations, hospitals and integrated health care delivery systems;
- medical specialty and professional societies;
- researchers;
- federal, state and local government health care policy makers and specialists; and
- employee benefit managers.

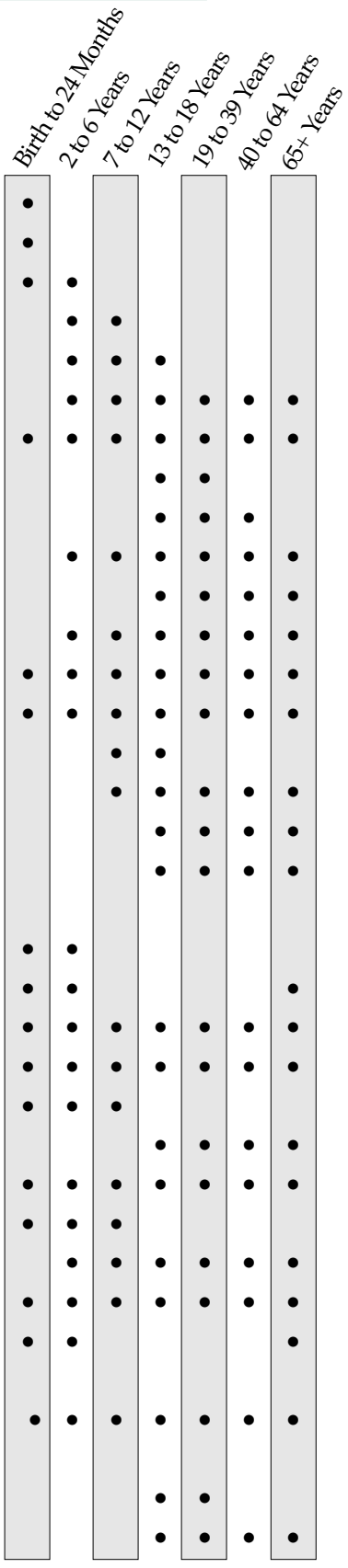
This *ICSI Health Care Guideline* should not be construed as medical advice or medical opinion related to any specific facts or circumstances. If you are not one of the expert audiences listed above you are urged to consult a health care professional regarding your own situation and any specific medical questions you may have. In addition, you should seek assistance from a health care professional in interpreting this *ICSI Health Care Guideline* and applying it in your individual case.

This *ICSI Health Care Guideline* is designed to assist clinicians by providing an analytical framework for the evaluation and treatment of patients, and is not intended either to replace a clinician's judgment or to establish a protocol for all patients with a particular condition. An *ICSI Health Care Guideline* rarely will establish the only approach to a problem.

ICSI

Institute for Clinical Systems Improvement

Health Care Guideline:
Preventive Counseling and Education - By Topic



Topics/Subtopic

1. Nutrition

- Breast Feeding
- Formula Use
- Iron Rich Diet
- Parent Role Models
- Healthy Snacks
- Calcium Intake
- Food Labels
- Folic Acid Supplements
- Limit Saturated Fat
- 5 A Day (fruits and vegetables rich diet)
- Caloric Balance/Nutrient Balance

2. Physical Activity

3. Substance Use/Abuse

- Tobacco (includes passive exposure)
- Start of Tobacco Use
- Alcohol and Other Drugs
- Drinking and Driving Motor Vehicles
- Motor Vehicle Operations

4. Injury Prevention

- Child Safety Seats
- Falls
- Firearm Storage
- Fire Safety
- Flame Resistant Sleep Wear
- Helmet for Motorcycles
- Motor Vehicles/Bicycles
- Poison, Water Safety, Choking
- Safety Belts
- Safety Helmets
- Water Heater Safety

5. Violence and Abuse

- Promotion of Non-Violent Behavior

6. Sexual Practices

- Unintended Pregnancy Prevention
- STD Prevention

General Implementation January 2000

Sub Group Members

Work Group Leader
Donald Hensrud, MD
Mayo Clinic

Internal Medicine
Peter Rothe, MD
HealthPartners
Donald Hensrud, MD
Mayo Clinic

Pediatrics
Andrew Rzepka, MD
HealthSystem Minnesota

Nursing
Beth Wodrich, FNP
Family HealthServices Minnesota

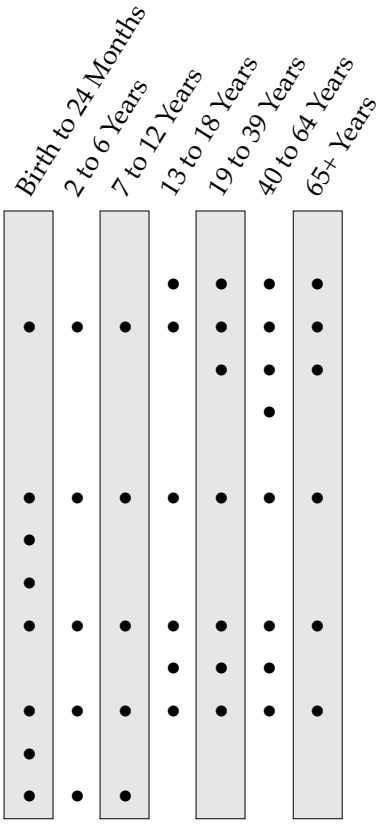
Health Education
Deb Sepeta, PA
Family HealthServices Minnesota

Nutrition
Teresa Rondeau-Ambroz, RD, LD
Center for Health Promotion
Marcia Hayes, RD, MPH
HealthPartners

Measurement Advisor
Jane Gendron
ICSI

Facilitator
Marcia Evans, RN
ICSI

These clinical guidelines are designed to assist clinicians by providing an analytical framework for the evaluation and treatment of patients, and are not intended either to replace a clinician's judgment or to establish a protocol for all patients with a particular condition. A guideline will rarely establish the only approach to a problem.



Topics/Subtopic (cont)

7. Mental Health

- Depression/Anxiety Awareness
- Coping Skills/Stress Reduction

8. Advance Directives

9. Post Menopausal Hormone Prophylaxis

10. Skin Cancer

- Protection for UV Light

11. Viral Upper Respiratory Infection

12. Infant Sleep Positioning and SIDS

13. Preventive Care Visits

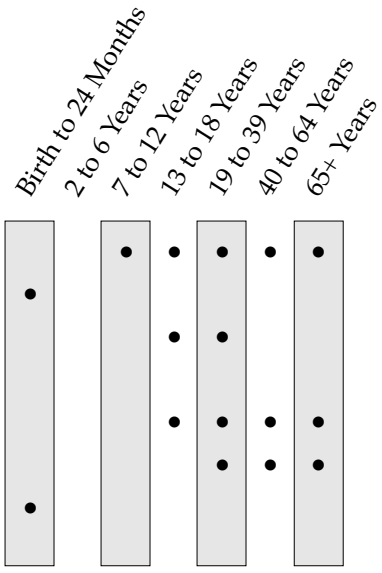
14. Preconception Counseling

15. Dental and Periodontal Disease

- Infants and Bottles
- Fluoride Supplements

Topics, Based on Strength of Recommendation

There is *good* evidence to support the recommendation and should be included in a periodic health examination.



1. Nutrition

- Limit Saturated Fat
- Breast Feeding
- Folic Acid Supplements

2. Substance Use/Abuse

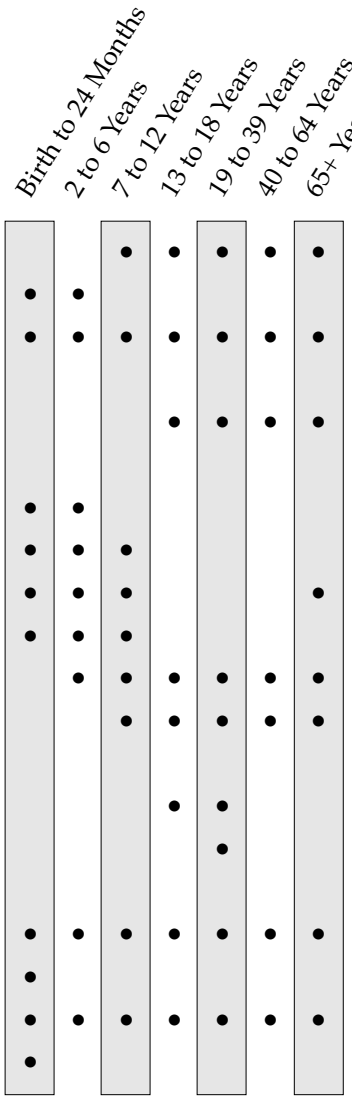
- Tobacco Cessation

8. Advance Directives

11. Viral Upper Respiratory Infection Visits

Topics, Based on Strength of Recommendation

There is *fair* evidence to support the recommendation and should be included in a periodic health examination.



1. Nutrition

- **Caloric Balance/Nutrient Balance**
- Iron Rich Diet

2. Physical Activity

3. Substance Use/Abuse

- Drinking and Driving Motor Vehicles

4. Injury Prevention

- Child Safety Seats
- Poisoning Prevention
- Water Heaters
- Flame-Resistant Sleep wear
- Safety Belts
- Safety Helmets

6. Sexual Practices

- Unintended Pregnancy Prevention

7. Postmenopausal Hormone Prophylaxis

10. Skin Cancer

- Protection from UV Light

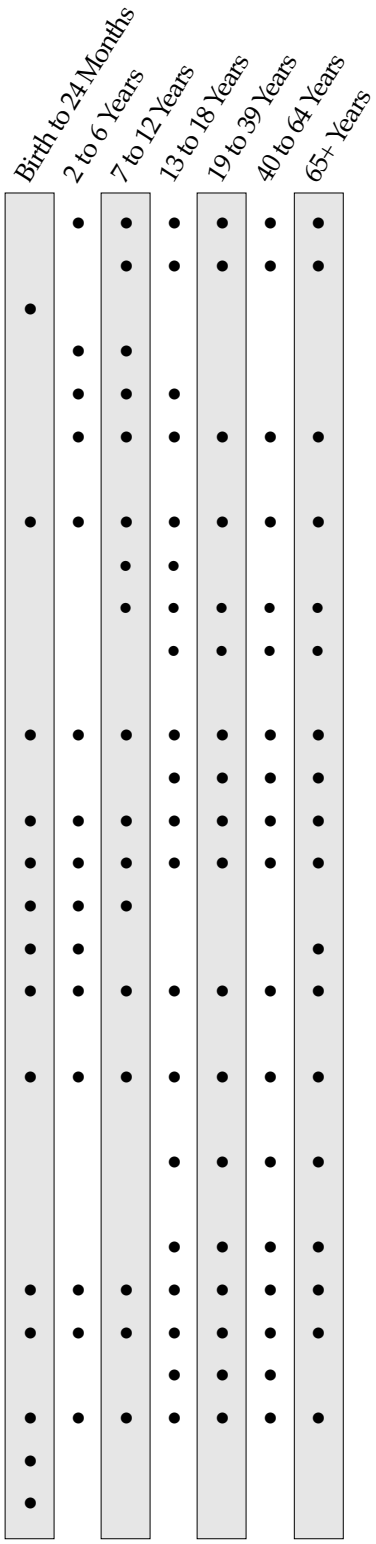
12. Infant Sleep Positioning and SIDS

14. Dental and Periodontal Disease

- Infants and Bottles

Topics, Based on Strength of Recommendation

There may be *insufficient* **direct** evidence that counseling a particular topic leads to a specific change of behavior; however, there *is* evidence linking these topics to health conditions and/or diseases.



	Birth to 24 Months	2 to 6 Years	7 to 12 Years	13 to 18 Years	19 to 39 Years	40 to 64 Years	65+ Years
1. Nutrition							
5 A Day (fruits and vegetables rich diet)		•	•	•	•	•	•
Food Labels			•	•	•	•	•
Formula Use	•						
Parent Role Models		•	•				
Healthy Snacks		•	•	•			
Calcium Intake		•	•	•	•	•	•
3. Substance Use/Abuse							
Tobacco (incl. passive exposure)	•	•	•	•	•	•	•
Start of Tobacco Use			•	•			
Alcohol and Other Drugs			•	•	•	•	•
Motor Vehicle Operation				•	•	•	•
4. Injury Prevention							
Motor Vehicles/Bicycles	•	•	•	•	•	•	•
Helmets for Motorcyclists				•	•	•	•
Safety Helmets (i.e., sports, bicycle)	•	•	•	•	•	•	•
Fire Safety	•	•	•	•	•	•	•
Poison, Water Safety, Choking	•	•	•				
Falls, Water Heater Safety	•	•					•
Firearm Storage	•	•	•	•	•	•	•
5. Violence and Abuse							
Promotion of Nonviolent Behavior	•	•	•	•	•	•	•
6. Sexual Practices							
STD Prevention				•	•	•	•
7. Mental Health							
Depression/Anxiety Awareness				•	•	•	•
Coping Skills/Stress Reduction	•	•	•	•	•	•	•
12. Preventive Care Visits	•	•	•	•	•	•	•
13. Preconception Counseling				•	•	•	
14. Dental and Periodontal Disease	•	•	•	•	•	•	•
Infants and Bottles	•						
Fluoride Supplements	•						

The ICSI Preventive Counseling and Education work group is a subgroup of the ICSI Preventive Services work group.

POPULATION OF INTEREST

All patients of ICSI Medical Groups.

RELATED GUIDELINES

Other ICSI guidelines whose scope and/or recommendations are closely related to the content of this guideline are:

1. Hormone Replacement Therapy
2. Lipid Screening in Adults and Children
3. Major Depression and Anxiety in Primary Care
4. Preventive Services

POTENTIAL AIMS FOR MEDICAL GROUPS WHEN USING THIS GUIDELINE

1. Improve the targeting of preventive counseling through the use of a risk assessment tool.

   Possible measure of accomplishing this aim:

   a. Percentage of patients with documented risk assessment results within the last five years.

2. Increase counseling and education about good health and disease and injury prevention.

   Possible measures of accomplishing this aim:

   a. Percentage of patients with documentation in their medical records of counseling information within five topic areas given within the last five years. Recommended topic areas include tobacco cessation, physical activity and nutrition.

   b. Percentage of patients with lipid level screening who received nutritional counseling and an assessment of physical activity at the same visit.

   c. Percentage of patients who smoke who receive a counseling message at the last clinic visit.

EVIDENCE GRADING

Individual research reports are assigned a letter indicating the class of report based on design type: A, B, C, D, M, R, X. A full explanation of these designators is found in the Discussion and References section of this guideline.

In future versions of this guideline, selected conclusions will include a statement of the grade assigned to the conclusion.

APPROPRIATE COUNSELING APPROACHES

The work group recommends that implementation of the Preventive Counseling and Education guideline be tied to a system to perform risk assessment of patients. This enables the provision of a tailored approach to counseling that is specific to an individual patient's risks.

The following approaches apply to each counseling recommendation unless otherwise noted.

WHO is to receive counseling

All patients should benefit from counseling about good health and prevention. This guideline recommends approaches for patients of average risk. The guideline's purpose is to increase awareness and motivate toward healthy behavior. It is not intended to diagnose or treat any condition. Consequently, once a health issue or condition has been uncovered, other guidelines (such as the ICSI Hypertension Diagnosis and Management guideline, the ICSI Tobacco Use Prevention and Cessation guidelines, or the ICSI Major Depression, Panic Disorder and Generalized Anxiety Disorder in Adults guideline) will take precedence during any further diagnosis and management.

WHO is to counsel and educate

These counseling and educational messages are to be provided by the primary care physician, nurse, or other health professional or educator.

Because clinicians often do not receive formal training in preventive counseling content and skills, the Preventive Counseling and Education guideline is intentionally comprehensive and detailed.

WHEN to counsel and educate

In general, some counseling should be carried out at each preventive care visit as well as at other times at clinical discretion. Once compliance with a health behavior has been attained, intermittent reinforcement messages may be substituted. Employers are encouraged to provide educational opportunities for employees using as many different methods as possible at regular intervals.

WHERE counseling and education should occur

As repetition of counseling messages is desirable, there should be shared responsibility between employers and medical groups for communicating these messages.

HOW to effectively deliver messages

A wide variety of counseling and education messages are recommended. The recommendation is to spread the messages across several visits when possible so as not to overwhelm the patient or the provider.

Communicating in a direct manner and making clear recommendations is encouraged; often the clinician enjoys a unique teaching relationship with the patient that should be maximized. Several provider attributes favorably impact patients' response to messages:

- Having a strong commitment to addressing preventive counseling and education topics.
- Communicating interest in helping individuals improve current and future health.
- Assessing the patient's readiness to change. The provider should recognize that it is a sign of progress when a patient becomes more ready to change a health-related behavior.

- Individualizing counseling and education based on an individual's most important risk factors. For each individual patient, personalizing the risk of behavior and the benefits of recommended change are effective messages to communicate. A thorough health risk history can help focus the counseling and education effort.
- Selecting behavioral goals that have a high probability of achievement/success. Achieving small incremental change can lead to sustained, permanent change.
- Not overloading the individual with too many tasks/facts.
- Through use of a flow sheet, keeping track of what counseling and education topics have been covered and which need to be carried out at a future visit.

A principal goal of the preventive encounter is to communicate that the patient can access clinicians and clinics as resources when the patient is interested in learning more information and/or is thinking of changing health-related behaviors. The clinician should cultivate an atmosphere in which the patient feels comfortable returning for such help.

HOW to effectively reinforce healthy behavior change

Given how challenging it is to change behaviors, it is important to support and reinforce even small improvements in health behavior.

1. NUTRITION

When to counsel and educate

Preventive counseling should be given at age-appropriate preventive care visits and at clinical discretion. Once compliance has been attained, the provider may substitute with intermittent reinforcing messages.

Counseling Messages

Age Group	Counseling and Education Messages
Birth - 2 Years	• Encourage breast feeding. Benefits include: - proper nutrient balance - avoidance of allergies - immunity enhancement - mother/child bonding • Infant formula and cereal should contain iron fortification. Risk factors for deficiency include premature birth and being exclusively breast fed after 4 months of age. • Encourage formula for non-breast fed children up to 1 year of age. • Encourage fluoride supplements where water supply is inadequate (well water, bottled water) *Please refer to Discussion and References #15, Prevention of Dental and Peridontal Disease, for recommended dosage.*
2 - 6 Years	• Emphasize adequate dietary iron. • Encourage parents to be role models for healthy eating. • Discuss availability of healthy snacks at set times during day (balanced diet recommended without excessive sugar and fat). • Acknowledge that appetites and food preferences change frequently (especially at age two). • Encourage adequate calcium intake. • Encourage "5 a day" (fruits and vegetables rich diet).

7 - 12 Years	• Encourage parents to be role models for healthy eating. • Use healthy snacks at set times during day (balanced diet recommended without excessive sugar and saturated fat). • Instruct to maintain caloric and energy balance for growth and desirable weight maintenance. Note trends in weight gain that are above the standard growth chart. • Encourage "5 a day" (fruits and vegetables rich diet). • Encourage adequate calcium intake.
13 - 18 Years	• Instruct to maintain caloric and energy balance for growth and desirable weight maintenance. Note trends in weight gain that are above the standard growth chart. • Advise to limit dietary intake of fat to < 30% total calories. • Advise folic acid supplements 0.4 mg/day at least one month prior to conception. See the ICSI Routine Prenatal Care guideline for counseling during pregnancy. • Encourage nutrient balance from five food groups/daily variety. • Instruct to maintain caloric and energy balance for growth and desirable weight maintenance. Note trends in weight gain that are above the standard growth chart. • Emphasize choosing healthy snacks. • Encourage "5 a day" (fruits and vegetable rich diet). • Encourage adequate calcium intake.
19 - 65+ Years	• Encourage nutrient balance from five food groups/daily variety. • Emphasize at least five servings of fruits and vegetables and six servings of breads, cereal or legumes daily, of which at least 2-3 should be whole grains. • Instruct to maintain caloric and energy balance for desirable weight maintenance. Monitor trends in weight change and compare to recommended BMI. • Advise to limit dietary intake of fat < 30% of total calories in fat. • Encourage adequate calcium intake. (Bone mass may be increased until age 30.) • Advise folic acid supplements 0.4 mg/day at least one month prior to conception and through first trimester. See the ICSI Routine Prenatal Care guideline for counseling during pregnancy.
All Individuals	• Counsel to follow guidelines without compromising energy and micronutrient intake: - substitute reduced fat animal products - moderate portion sizes • Promote reading of food labels to determine nutrient content.

2. *PHYSICAL ACTIVITY*

When to counsel and educate

Preventive counseling should be given at age-appropriate preventive care visits and at clinical discretion. Once compliance has been attained, the provider may substitute with intermittent reinforcing messages.

Counseling Messages

Age Group	Counseling and Education Messages
0 - 2 Years	• Recommend no television viewing
2 - 18 Years	• Discuss the fact that healthy activity habits for a lifetime begin in youth. • Encourage a reduction in sedentary time (watching television, playing video games, computer time) and increase time at active play.

19 - 65 + Years	• Discuss the fact that physical activity can reduce risk for: - cardiovascular disease - hypertension - osteoporosis - obesity - stress - diabetes • Discuss the fact that adequate aerobic activity may prevent heart disease and manage stress and includes: - walking, jogging, bicycling, organized exercises - deliver message with other heart disease risk assessment and reduction advice, such as nutritional advice • Discuss non-traumatic weight-bearing exercise (e.g., walking) for osteoporosis prevention.
All Individuals	• Personalize benefits of physical activity including a sense of well being. • Emphasize regular, moderate intensity physical activity ideally progressing to 30 minutes or more per day. • Even modest increases in physical activity are beneficial. • Encourage activities throughout the day that improve health. Such activities should: - increase caloric expenditure - enhance cardiovascular fitness - have a low risk of injury - develop and maintain muscle strength and joint flexibility. • Encourage activities that foster long-term compliance. Such activities tend to: - be enjoyable - be convenient - be low cost - have low perceived exertion • More information is available on the benefits of regular physical activity. • Additional resources for suggested physical activity

3. SUBSTANCE USE AND ABUSE

Tobacco

Tobacco use kills more Americans each year than alcohol, cocaine, crack, heroin, homicide, suicide, car accidents, fires and AIDS combined. One in four people you see in your practice is a smoker. The preventive counseling message consists of asking every patient about tobacco use, advising tobacco users to quit, asking how interested they are in quitting, and providing counseling assistance where appropriate. An additional message should be to avoid passive exposure to smoke. Work sites should be smoke free, and should provide a variety of ongoing opportunities to encourage and enable employees and their families to quit using tobacco.

When to counsel and educate

Tobacco use should be addressed at every reasonable opportunity.

Counseling Messages

Age Group	Counseling and Education Messages
Birth - 6 Years	• Focus messages on smoking parents, especially avoiding smoking around children.
7 - 11 Years	• Advise not starting to use tobacco (any form). • Focus messages on smoking parents, especially avoiding smoking around children.
12 - 18 Years	• Advise not starting to use tobacco (in any form).
13 – 65+ Years	• Ask (about use at every opportunity). • Advise (to quit). • Assist (in quitting). • Arrange (follow-up). • Advise regarding the use of nicotine patches or gum as adjunct to cessation.
19 - 39 Years	• Discuss the fact that cessation is particularly important during pregnancy.
40 - 65 + Years	• Emphasize that it's never too late to benefit from quitting.
All Individuals	• Passive exposure is harmful and should be avoided. • More information and assistance is available.

See the ICSI Tobacco Use Prevention and Cessation guidelines for children and adults.

Alcohol and other drugs

The principle strategy for preventing morbidity and mortality from alcohol and other drug abuse lies in the effective detection of those in whom that abuse occurs.

Counseling Messages

Age Group	Counseling and Education Messages
7 - 12 Years	•Reinforce alcohol and drug abuse prevention and education
13 - 18 Years	• Counsel on the dangers of operating a motor vehicle under the influence. • Assess current use of alcohol/drugs. • Advise all women of childbearing age of the harmful effects of alcohol on a fetus and advise them to limit or cease alcohol intake. • Reinforce not drinking and driving: - abstinence if driving - parents/others to assist with designated driver • Discuss acceptable use of alcohol in home. • Discuss characteristics of dependency.
19 - 39 Years	• Assess current use of alcohol/drugs. • Advise all women of childbearing age of the harmful effects of alcohol on a fetus and advise them to limit or cease alcohol intake. • Reinforce not drinking and driving. • Discuss characteristics of dependency.
40 - 65 + Years	• Assess current use of alcohol/drugs. • Reinforce not drinking and driving. • Discuss characteristics of dependency.

All Individuals	• Don't ride with someone who is under the influence. • Prevent others from driving in this condition - "Friends don't let friends drive drunk." • More information is available about: - recognition of alcohol and drug dependence - resources and treatment options

4. Injury Prevention

Motor Vehicle Safety

Counseling Messages

Age Group	Counseling and Education Messages
Birth - 6 Years	• Install and regularly use federally approved child safety seats. • Discuss the fact that infants should face the rear of the vehicle until they are both 1 year of age and 20 lbs, and should not be placed in any seat with an air bag. (Best - middle rear seat.) • All children under 4 years of age must be properly restrained. • Discuss the fact that children weighing between 40-60# should be in a booster seat until approximately 8 years of age. • Discuss proper child restraint. (Minnesota Statute 169.685)
All Individuals	• Discuss always wearing a safety belt when driving or riding in a car (Minnesota Statute 169.686). - all front seat occupants - back seat occupants under age 11 • Do not drive or ride in a motor vehicle when the driver is under the influence of alcohol or drugs. • Discuss the fact that 50% of death and disability from motor vehicle accidents can be prevented when passengers routinely wear seat belts. • Discuss the fact that passengers should not ride in cargo areas of pickup trucks. • Discuss the fact that passengers should not ride in cargo areas of station wagons or vans except when those areas are fitted with seats and safety belts. • The safest way to travel is to ensure that EVERYONE in the vehicle is correctly buckled up and that all children under age 13 ride in the back seat. • Discuss the fact that airbags are effective. • Children under 13 should not sit in front of an airbag.

Bicycle Safety

Counseling Message

Age Group	Counseling and Education Messages
All Individuals	• Reinforce always wearing an approved safety helmet when riding a bicycle. • Follow safety rules (look carefully for traffic, signal turns, etc.). • Avoid riding in heavy motor vehicle traffic.

Fire Injury Prevention

Counseling Message

Age Group	Counseling and Education Messages
Birth – 12 Years	• Encourage the use of flame-resistant sleep wear.

All Individuals	• Install smoke detectors and test them periodically. • Discuss the use of "911" for fire emergencies. • Cigarettes used by adults are the leading cause of ignition in fatal house fires; avoid smoking near bedding or upholstery. • Discuss the fact that residential fires occur more frequently in the winter due to the use of portable heaters, fireplaces, and Christmas trees. • Matches, lighters and smoking materials should be handled safely and shouldn't be available to children. They also present a high risk for the elderly. • Discuss the importance of a family fire escape plan with predesignated meeting location outside of home.

Poisoning Prevention

Counseling Message

Age Group	Counseling and Education Messages
Birth - 12 Years	• Reinforce having the poison control phone number readily accessible. • Use child-resistant containers for medications, toxic substances and matches. • Dispose of expired or unused portions of medications. • Instruct to contact local emergency department for instructions regarding timing and dosage of syrup of ipecac.

Fall Prevention

Counseling Messages

Age Group	Counseling and Education Messages
Birth - 2 Years	• Use window and stairway guards/gates to prevent falls from stairways, balconies, and windows. • Discourage walker use. • Prevent falls from changing tables by never leaving child unattended.
2 - 6 Years	• Assess and control environment to reduce likelihood of falls from stairs, balconies, windows, etc.
65 + Years	• Encourage exercise to enhance muscle strength. • Monitor medications to avoid side effects that impair balance. • Improve gait stability through balance and gait training. • Assess and control environment to reduce the likelihood of falls due to: - stairs - pavement irregularities - slippery surfaces (install hand rails and traction strips in stairways and bathtubs) - inadequate lighting - suboptimal visual acuity (obtain regular refraction, cataract treatment) - unexpected objects (loose rugs, electrical cords, toys) - low chairs - incorrect footwear

Hot Water Prevention

Counseling Messages

Age Group	Counseling and Education Messages
Birth - 12 Years	• Reinforce setting the household hot water heater at or below 120˚ F to prevent burns.
65 + Years	• Reinforce setting the household hot water heater at or below 120˚ F to prevent burns.

Water Safety

Counseling Messages

Age Group	Counseling and Education Messages
Birth - 6 Years	• Reinforce never leaving infants or young children alone in a bath. • Reinforce never leaving infants or young children alone near standing water. • Install isolation fences around swimming pools. • Encourage CPR training.
7 - 12 Years	• Discuss the fact that swimming lessons are not a substitute for adult supervision. • Encourage CPR training.

Choking Prevention

Counseling Messages

Age Group	Counseling and Education Messages
Birth - 6 Years	• Discuss avoiding foods that children commonly choke on (hot dogs, peanuts, popcorn, hard candy, raw carrots). • Discuss avoiding other nonfood items that children commonly choke on (balloons, age-inappropriate items such as small toys). • Discuss avoiding eating while walking or running. • Teach back blows and chest thrusts to parents of infants; teach Heimlich maneuver to parents of children greater than 1 year of age. Encourage CPR training.

Firearm Injury Prevention

Counseling Messages

Age Group	Counseling and Education Messages
13 - 65 + Years	• Teach firearm safety (proper handling, hunting practices including wearing orange fluorescent clothing).
All Individuals	• Ask about firearms in the home and how they are stored. • Discuss safe storage of firearms when appropriate. • Keep ammunition in a safe/locked place separate from the firearm.

5. Violence and Abuse Prevention

The medical community is uniquely positioned to play an important role in the prevention of violence and abuse. Employers can also contribute to prevention ideas and programs. Clinicians should also be alert for symptoms and signs of drug abuse and dependence, various presentations of family violence, and suicidal ideation in persons with established risk factors.

Counseling Messages

The following ideas regarding content are derived from a variety of expert opinion articles on violence prevention. They are offered as suggestions for initial efforts in dealing with this important health problem. They have not been subjected to rigorous evaluation.

Age Group	Counseling and Education Messages
Birth - 2 Years	• Discuss positive alternatives to spanking, shaking, hitting, and yelling. • Provide anticipatory guidance for parents with emphasis on colic, awakening at night, separation anxiety, normal exploratory behavior, normal negativism, normal poor appetite, toilet training resistance • Encourage care in choosing day care providers and baby sitters. • Recommend home health visits for selected populations.
2 - 11 Years	• Discuss amount and type of television/videos watched; encourage choices with minimal or no violent content. • Ask about discipline/punishments employed and for what offenses. • Discuss war toys and nonviolent alternatives. • Emphasize importance of showing frequent affection and eating meals as a family. • Discuss ways to stop potentially violent arguments, including street fighting. • Ask parents about the child's yelling or physical fights in the last 6 months. • Sexual abuse prevention: - Encourage parents to teach children normal anatomic terms for body parts; reassure parents about normalcy of sexual curiosity and play; encourage parents to give their children straightforward answers about sex; encourage parents to give child permission to say "no" to advances and to teach about "private places"; encourage children to talk about frightening experiences.
12 - 18 Years	• Discuss types of television, movies and music preferred; encourage choices with minimal or no violent content. • Take a violence history (to include history of abuse, forced sexual activity, weapon exposure). • For domestic issues, see the **ICSI Domestic Violence guideline**. • Discuss awareness of potential violence in dating and relationships, emphasizing the need to set boundaries and clearly communicate them to others. • Discuss ways to stop potentially violent arguments. • Discuss sexual orientation and associated potential risk of violence exposure.
19 - 65 + Years	• Take a violence history (to include history of abuse, forced sexual activity, weapon exposure). • For domestic issues, see the **ICSI Domestic Violence guideline**. • Explore parenting readiness where appropriate. • Discuss awareness of potential violence in dating and relationships, emphasizing the need to set boundaries and clearly communicate them to others. • Discuss ways to stop potentially violent arguments. • Discuss sexual orientation and associated potential risk of violence exposure.
All Individuals	• Discuss the fact that experiencing anger and conflict is normal. • Discuss the fact that dealing with conflict violently is a learned behavior which has dire consequences. Violent behavior can also be unlearned. • Reinforce nonviolent discipline and conflict resolution. • Reinforce the fact that no person should fear violence or abuse in any of their relationships. • Discuss safe storage of firearms when appropriate. • Ask about weapons in the home and how they are stored. • Information and assistance is available.

6. SEXUAL PRACTICES

Unintended Pregnancy Prevention

Messages should be delivered verbally and educational materials should also be given. Detailed information on contraceptive methods should be discussed if indicated. Counseling should take into account individual preferences, concerns, abilities, and risks (including STD risk) for each patient and his or her partner.

When to counsel and educate

Preventive counseling should be given at preventive care visits beginning at age 12. These visits will frequently include education and counseling regarding contraception and pregnancy. These messages should also be given as indicated by clinical discretion (e.g., vaginitis, STD symptoms).

Counseling Messages

Age Group	Counseling and Education Messages
13 - 39 Years	• Counsel to prevent unintended pregnancy.
13 - 64 Years	• Obtain a sexual history from all adolescents and adults. • Inform adolescents that abstinence is the most effective way to prevent pregnancy and STDs. • Provide detailed education and information regarding contraceptive methods. • To enhance acceptance of contraceptive methods, health benefits such as decreased STD risk and the benefits of oral contraceptive pill should be discussed. - Women using oral contraceptives are at a reduced risk of developing ovarian and endometrial cancer. - Women who use barrier contraceptives or spermacides are at a reduced risk of developing cervical cancer. - Women who undergo tubal sterilization are at a reduced risk of developing cervical cancer • More information and assistance is available.

Sexually Transmitted Disease Prevention

Empathy, confidentiality and a non-judgmental, supportive attitude are important when discussing issues of sexuality. Messages should be delivered both verbally and in the form of educational materials.

A complete sexual and drug history should be obtained on all adolescents and adults.

Please note that this guideline discusses primary prevention of STDs through the adoption of safer sexual practices. It does not address patient education messages after an STD is diagnosed.

When to counsel and educate

Preventive counseling should be given at preventive care visits beginning at age 12. These visits will frequently include education and counseling regarding contraception and pregnancy. These messages should also be given as indicated by clinical discretion (e.g., genitourinary symptoms).

Counseling Messages

Age Group	Counseling and Education Messages
13 - 65 + Years	• Reinforce the fact that abstinence is the most effective means to decrease STD risk. • Reinforce the fact that a mutually monogamous relationship with a partner known not to be infected is effective in decreasing STD risk.

- Encourage safer sexual practices including regular use of latex condoms.
- Reinforce increased risk associated with multiple partners.
- Reinforce avoiding sexual contact with high risk partners (e.g., intravenous drug users, commercial sex workers, and persons with numerous sexual partners).
- Emphasize that alcohol/drug use is associated with high risk sexual behavior.
- Inform women at risk that spermicides and female barrier contraceptive methods (i.e., diaphragm or cervical cap) can reduce the risk of gonorrhea and chlamydia.
- More information is available including the proper use of condoms if indicated

7. Mental Health Awareness

Depression and Anxiety Awareness

Depression is the most common psychiatric illness with a prevalence of 3-5% in the general population and may be present in up to 30% of patients seen a primary care practice. Depression often goes unrecognized by patient and physician, employee and employer.

The guideline work group concurs with the United States Preventive Services Task Force recommendation to be alert to symptoms and signs of depression. Additionally, because of the enormous burden of suffering associated with this disorder and its tragic under-recognition in clinical practice, general messages should be given to all individuals to increase the likelihood that depression will be recognized appropriately.

Counseling Messages

Age Group	Counseling and Education Messages
All Individuals	• Reinforce the fact that anyone is at risk for developing a serious depression. • Teach the patient that depression can lead to physical symptoms (headaches, chronic pain, digestive symptoms, etc.), poor quality of life, and even suicide. • Discuss the fact that often it is difficult for depressed people to recognize this problem in themselves. • Discuss the fact that all individuals should be aware of the basic signs of depression so that they can identify the problem in themselves or others. • Reinforce the fact that effective treatments for depression are available. • More information and assistance is available

Anxiety Awareness

Counseling Messages

Because of the enormous burden of suffering associated with anxiety, general messages that may increase the likelihood of anxiety recognition are advised by the guideline work group for all individuals.

Age Group	Counseling and Education Messages
All Individuals	Reinforce the following messages: • Anyone is at risk for developing serious anxiety. • Anxiety can lead to many symptoms including headaches, poor sleep, chest pain, palpitations, abdominal pain, etc. • Often it is difficult for anxious people to recognize this problem in themselves.

- All individuals should be aware of the basic signs of anxiety so that they can identify the problem in themselves or others.

  Signs and symptoms of anxiety include:

  - tension, worry or preoccupation over a fear whose source is often unrecognized
  - rapid heart beat or rapid breathing
  - gastrointestinal symptoms (abdominal cramping, diarrhea, etc.)
  - headaches
  - impatience and being irritable
  - fatigue and poor sleep
  - muscle aches and pains
  - dizziness and light-headedness

- Effective treatments for anxiety are available.
- More information and assistance is available.

Stress/Coping Skills

When to counsel and educate

Messages about stress and coping skills are recommended at age-appropriate preventive care visits, at visits for symptoms listed below or when the patient reports major life change.

Counseling Messages

Age Group	Counseling and Education Messages
All Individuals	Reinforce the following messages: • Stress is a normal part of our lives. • Stress can be positive or negative. • Everyone has control over their own body's reaction to stress. • A negative response to stress may include many symptoms. • More information and assistance is available.

8. Advance Directives

Everyone is at risk of entering into a medical crisis in which they are not competent to make decisions and in which the availability of an Advance Directive would be desirable. The vast majority of people feel comfortable discussing this topic, but lack of provider initiative is cited as a major barrier to completion.

Advance Directives (or "Health Care Directives") allow a patients' wishes to drive medical decision making in the event that they are incapable of communicating their preference during a medical crisis. Advance Directives can take several forms:

1. Living Will - a legal document that gives written instructions regarding under what circumstances the person would wish particular types of medical care to be provided, withheld or withdrawn should the author become incapable of making these decisions.
2. Durable Power of Attorney for Health Care - the legal designation of another person (usually a family member) to speak on his or her behalf regarding medical care choices should the author become incapable of making these decisions.

3. Oral Declarations - verbal statements to family or friends regarding medical care preferences. This might also include notification of family/friends of the existence and location of written advance directives. Oral statements provide guidance, but in general, providers have more confidence in written statements. Oral statements have legal standing in some states, but **not** in Minnesota.

The new "Health Care Directives," established by the Minnesota Legislature and effective August 1, 1998, is a written document that satisfies new State of Minnesota requirements for advance directives. This document combines the functions of a Living Will and Durable Power of Attorney for Health Care into a single legal declaration, i.e., it informs others of the individual's wishes about health care and allows naming a person ("agent") to decide if the individual is unable to decide or if the individual wants someone else to decide. For more information regarding this law, please contact the Minnesota Department of Health, Board of Aging, 717 Delaware Street Southeast, Minneapolis, MN, 55440-9441, or call (800) 333-2433.

When to counsel and educate

- Every 5 years if an individual is age 19-64 and hasn't yet made a declaration and has no potentially life-threatening medical problems.
- Every 1-2 years if an individual has potentially life-threatening medical problems or is more than 64 years old and hasn't made a declaration.
- All completed advance directives should be reviewed periodically by the individual and providers to make sure that the declaration still accurately represents the individual's wishes.

Counseling Messages

Age Group	Counseling and Education Messages
19 - 39 years	Reinforce the following messages: • Everyone should consider whether they would wish to have their organs donated after death. If they would, they should sign a declaration. • Information is available if there is an interest in reviewing advance directive options for yourself or others (such as parents).
40 + years	• Everyone should consider what medical treatments they would accept or refuse should they be unable to communicate their preferences to their doctor. • Everyone should consider whether they would wish to have their organs donated after death. If they would, they should sign a declaration. • Everyone should complete an advance directive and communicate their preferences verbally to their family and physician. • The State of Minnesota Health Care Directive form can be obtained from the Minnesota Department of Health.

9. Post Menopausal Hormone Prophylaxis

When to counsel and educate

Clinicians should counsel all women around the time of menopause about the possible benefits and risks of postmenopausal hormone therapy and the available treatment options.

Counseling Messages

Age Group	Counseling and Education Messages
40 –55	• Discuss the possible benefits and risks of postmenopausal hormone therapy.

45 –55	• Discuss the possible benefits and risks of postmenopausal hormone therapy. • Ask about the presence and severity of menopausal symptoms (hot flashes, urogenital symptoms, etc.) • Assess risk factors for: - heart disease - osteoporosis - breast cancer • Ask about the presence and severity of menopausal symptoms (hot flashes, urogenital symptoms, irritability/anxiety, mood swings) • Advise women of: - the probable benefits of hormone therapy on menopausal symptoms, myocardial infarction, and fracture; - the increased risks of endometrial cancer with unopposed estrogen; and - the possible increased risk of breast cancer. • Encourage preference-based decision making considering the relative importance of these benefits and risks, and possible side effects of treatment, and each woman's willingness to take medication for an indefinite period. • Women considering estrogen therapy should be counseled about available estrogen and progestin preparations, routes of administration and dosing regimens. • Discuss potential alternative treatments for menopausal symptoms as well as other alternatives for preventing osteoporosis and reducing risk of heart disease including screening for high cholesterol and hypertension and counseling to promote physical activity and a healthy diet. • For further information, see ICSI Hormone Replacement Therapy guideline.

10. Skin Cancer

Counseling Messages

Age Group	Counseling and Education Messages
All Individuals	• Skin cancer can be prevented by avoiding overexposure to the sun. Prevention includes: - limit exposure to the sun (particularly between 10 am and 3 pm) - covering skin with hats, shirts, etc. - using sun block (sun protective factor ≥ 15, reapply as necessary) • More information is available.

11. Viral Upper Respiratory Infection

Counseling Messages

Age Group	Counseling and Education Messages
Birth - 2 Years	• Counsel on the following areas during well child visits: - prevention of viral upper respiratory infection (VURI) - frequency, symptoms and normal course of VURI - types of respiratory illnesses that occur in children - symptoms suggestive of illness other than VURI - assessing degree of illness and deciding when to call the clinic - home care of VURI - good handwashing

12. Infant Sleep Positioning and SIDS

Recent studies have shown an increased incidence of Sudden Infant Death Syndrome (SIDS) in infants who sleep on their stomachs. There is no evidence that sleeping on the back or side is harmful to normal infants.

While the risk of SIDS for infants who sleep on their stomachs may be higher than for those who sleep on their sides or back, the actual risk of SIDS when placing infants on their stomachs is still extremely low.

Counseling Messages

Age Group	Counseling and Education Messages
Birth - 24 Months	• Parents and caregivers should consider placing healthy infants on their sides or backs when putting them down to sleep. • There are certain infants who may need to be placed on their stomachs, including: - premature infants with respiratory distress - infants with symptoms of gastroesophageal reflux - infants with certain upper airway abnormalities - symptoms suggestive of illness other than VURI • Parents should discuss their individual circumstances regarding infant sleep positioning with their pediatrician.

13. Preventive Care Visits

Assuring patient awareness of visits, and of the appropriate schedule, may maximize the effectiveness of a prevention program.

Counseling Messages

Age Group	Counseling and Education Messages
All Individuals	• Assess patients' risk factors and history for all conditions included in the Preventive Services guidelines; risk assessment can help providers to determine appropriate schedules for preventive services. • Emphasize patients' responsibility for making and keeping appointments for preventive care visits, tests, procedures and vaccinations. • When checking lipid levels, assess and/or counsel for exercise and nutrition.

14. Preconception Counseling

Counseling Messages

Age Group	Counseling and Education Messages
13 years – Menopause	• Inform all women of childbearing age of the deleterious effects of of teratogens in early pregnancy, often before the pregnancy is diagnosed. • Encourage women who are seeking to become pregnant to schedule a preconception counseling visit. (See the ICSI Preterm Birth Prevention and Routine Prenatal Guidelines.)

15. Prevention of Dental and Periodontal Disease

Assuring patient awareness of visits, and of the appropriate schedule, may maximize the effectiveness of a prevention program.

Counseling Messages

Age Group	Counseling and Education Messages
Birth - 2 years	• Discourage the practice of putting infants and children to bed with a bottle. • Encourage fluoride supplements for inadequate fluoridation in the water supply (i.e., well water, bottled water) and for exclusively breast-fed infants. (See Discussion and Reference section for recommended dosages.) • Encourage wiping teeth with a piece of gauze or a damp cloth. • Encourage women to breast feed.
2 – 65+ Years	• Encourage regular dental care visits. • Encourage brushing teeth daily with a toothpaste that contains fluoride. • Encourage cleaning thoroughly between teeth with dental floss each day. • Encourage chemotherapeutic mouth rinses for plaque prevention.

Discussion and References:

Preventive Counseling and Education

Document Drafted
Jan – Jul 1994

Critical Review
Jun – Jul 1994

Revision/Approval
Jul – Sept 1994

Pilot Implementation
Oct 1994 – Jan 1995

Revision Approval
Feb – Apr 1995

First Cycle General Implementation
May – Oct 1995

Revision/Approval
Nov 1995 – Jan 1996

Document Reworked to Reflect Evidence Grading
Feb – Oct 1996

Revision/Approval
Nov 1996 – Jan 1997

Second Cycle General Implementation
Feb – Sept 1997

Revision/Approval
Oct 1997 – Jan 1998

Third Cycle General Implementation
Feb – Sept 1998

Revision/Approval
Oct 1998 – Jan 1999

Fourth Cycle General Implementation
Feb – Sept 1999

Revision/Approval
Oct 1999 – Jan 2000

Fifth Cycle General Implementation
Begins Feb 2000

Released in January 2000 for General Implementation.
The next revision will occur within 18 months.

I. CLASSES OF RESEARCH REPORTS

A. Primary Reports of New Data Collection:

Class A: Randomized, controlled trial

Class B: Cohort study

Class C: Non-randomized trial with concurrent or historical controls
Case-control study
Study of sensitivity and specificity of a diagnostic test
Population-based descriptive study

Class D: Cross-sectional study
Case series
Case report

B. Reports that Synthesize or Reflect upon Collections of Primary Reports:

Class M: Meta-analysis
Decision analysis
Cost-benefit analysis
Cost-effectiveness study

Class R: Review article
Consensus statement
Consensus report

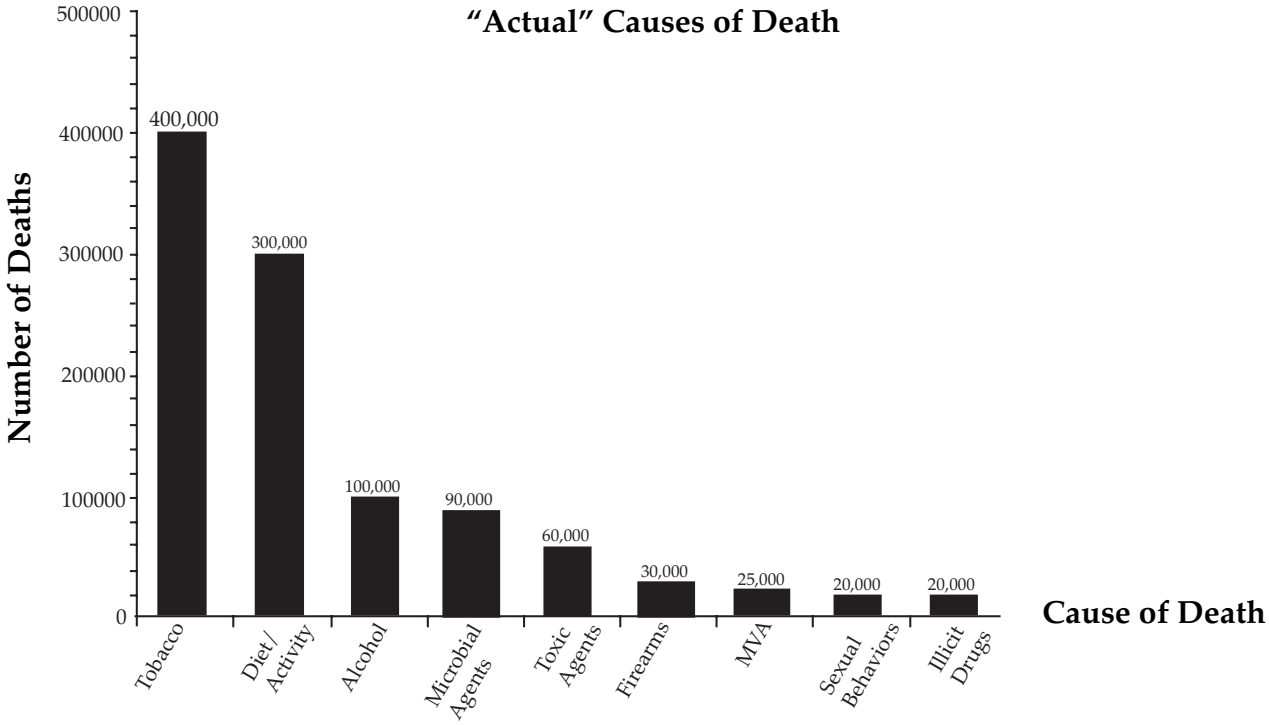
Class X: Medical opinion

PRINCIPAL SOURCE

The Preventive Counseling and Education Work Group's recommendations generally follow the U.S. Preventive Services Task Force (USPSTF) recommendations for counseling with the following exceptions:

- a new category, "Advance Directives," to be addressed with adults.

GENERAL COMMENTS



There is no question that the adoption of the preventive health behaviors addressed in this document would significantly reduce morbidity and mortality in the general population.

Modifiable health behaviors could account for up to 50% of deaths in this country.

> McGinnis JM, Foege WH. "Actual causes of death in the United States." *JAMA* 270:2207-12, 1993. (Class R)

This Preventive Counseling and Education Guideline provides the rationale and recommends content, systems support and resources to encourage health care professionals and educators to actively facilitate health behavior change that can lead to such outcomes as improved health status, reduction in risk factors, and lower costs associated with medical care.

The evidence for the effectiveness of counseling interventions is strongest for tobacco cessation, dietary change, and improvements in exercise habits. In several other areas the evidence is unclear due to insufficient research.

It is entirely appropriate to provide counseling and education in such settings as work sites and schools as well as in the medical office. This guideline focuses primarily on health care and work site settings.

The majority of the following information concerning burden of suffering, efficacy of screening and efficacy of early detection is taken from the USPSTF.

1. NUTRITION

Burden of Suffering

Diseases associated with dietary excess and imbalance rank among the leading causes of illness and death in the United States. Major diseases in which diet plays a role include coronary artery disease, cancer of the colon, breast and prostate, and stroke. Obesity is a risk factor for a number of serious disorders, including both hypertension and diabetes mellitus. Lipid disorders are additional conditions in which diet plays a significant role. Nutritional factors have also been linked to osteoporosis, constipation, diverticular disease, and dental disease.

Nutritional Efficacy of Risk Reduction

It is clear that a direct relationship exists between nutritional risk factors and certain key diseases. In addition to the overall objective of caloric balance, modified intake of specified dietary factors may also help prevent certain diseases. Some of these dietary factors are saturated fat, cholesterol, complex carbohydrates, fiber, sodium, calcium and iron. Multiple studies have found that fruit and vegetable consumption have an effective protective effect for certain types of cancer. Refer to USPSTF (1996 second edition), page 626-634 for additional discussion of the evidence and literature supporting these recommendations.

Dietz W. "Critical periods in childhood for the development of obesity." *Am J Clin Nutr* 59:955-59, 1994. (Class R)

Jacobs DR Jr, Meyer KA, Kushi LH, et al. "Whole-grain intake may reduce the risk of ischemic heart disease death in postmenopausal women: the Iowa women's health study." *Am J Clin Nutr* 68:248-57, 1998. (Class B)

Kimm SYS. "The role of dietary fiber in the development and treatment of childhood obesity." *Pediatr* 96:1010-15, 1995. (Class R)

National Institutes of Health Consensus Development Conference Statement. "Optimal calcium intake." 12:1-31, 1994. (Class R)

Pietinen P, Rimm EB, Korhonen P, et al. "Intake of dietary fiber and risk of coronary heart disease in a cohort of Finnish men: the alpha-tocopherol, beta-carotene cancer prevention study." *Circulation* 94:2720-27, 1996. (Class B)

Rimm EB, Ascherio A, Giovannucci E, et al. "Vegetable, fruit, and cereal fiber intake and risk of coronary heart disease among men." *JAMA* 275:447-51, 1996. (Class B)

Rolls B, Bell EA, Castellanos VH, et al. "Energy density but not fat content of foods affected energy intake in lean and obese women." *Am J Clin Nutr* 69:863-71, 1999. (Class C)

Steinmetz KA, Potter JD. "Vegetables, fruit, and cancer prevention: a review." *J Am Diet Assoc* 96:1027-39, 1996. (Class R)

Effectiveness of Counseling

The effectiveness of nutritional counseling in changing the dietary habits of patients has been demonstrated in a number of trials. In most of these trials, however, the counselor was not a physician, and the interventions studied were highly specialized or community-wide programs. Physicians may not have the specialized training or the time to perform in-depth assessment and counseling, and patients may have difficulty with long-term compliance if the advised regimen is perceived as inconvenient or unappealing. It is possible, however, that physicians can overcome many of these limitations by expanding the content of the nutritional information they provide to patients, by emphasizing to the

patient the health benefits of good nutrition, and by referring those requiring help with dietary changes to qualified nutritionists, registered dietitians, health educators, nurses, or other providers with greater nutrition expertise.

U.S. Preventive Services Task Force. "Counseling to promote a healthy diet." In Guide to clinical preventive services. DiGuiseppi C, Kamerow DB, eds. Baltimore: Williams & Wilkins, 1996: 625-42. (Class R)

deLorgeril M, Salen P, Martin J-L, et al. "Mediterranean diet, traditional risk factors, and the rate of cardiovascular complications after myocardial infarction: final report of the Lyon Diet Heart Study." *Circulation* 99:779-85, 1999. (Class A)

Dietz W. "Therapeutic strategies in childhood obesity." *Horm Res* 39(suppl 3):86-90, 1993. (Class R)

Mant D. "Effectiveness of dietary intervention in general practice." *Am J Clin Nutr* 65(suppl):1933S-38S, 1997. (Class R)

2. *Physical Activity*

Burden of Suffering

Physical inactivity has been associated with a number of debilitating medical conditions in the United States, including coronary artery disease, hypertension, non-insulin-dependent diabetes mellitus, and osteoporosis.

Efficacy of Risk Reduction

Studies have shown that men who are physically active on a regular basis have a lower overall mortality than those who are physically inactive. Exercise appears to be especially effective in improving health status in six disease-specific areas: CAD, hypertension, obesity, NIDDM, osteoporosis, and diminished psychological well-being. Most studies have used different definitions for physical activity and therefore it is not clear from the evidence exactly what form of exercise is most beneficial. The ICSI guideline recommendations are based on the USPSTF conclusion that many of the health benefits of exercises may be obtained even at lower intensity and frequency levels than previously thought, and that activities such as brisk walking, climbing stairs, and gardening can be beneficial. Inactive persons, as well as those who are hypertensive or obese, can benefit significantly from even modest increases in physical activity.

Dietz W, Bandini LG, Morelli JA, et al. "Effect of sedentary activities on resting metabolic rate." *Am J Clin Nutr* 59:556-59, 1994. (Class C)

Manson JE, Hu FB, Rich-Edwards JW, et al. "A prospective study of walking as compared with vigorous exercise in the prevention of CHD in women." *N Engl J Med* 341:650-58, 1999. (Class B)

Effectiveness of Counseling

The majority of patients seen by physicians could potentially benefit from encouragement to increase physical activity levels. There is now evidence that counseling of asymptomatic patients does increase physical activity, at least in the short-term (4-6 months). The impact of counseling on long-term compliance remains unproven. Despite the limitations noted above, the intervention is warranted because of the numerous potential health benefits associated with physical activity. From a population perspective, even modest increases in the number of individuals who are physically active could have large public health implications.

American Academy of Pediatrics. "Television and the family." AAP: 1999. (Class not assignable)

Calfas KJ, Long BJ, Sallis JF, et al. "A controlled trial of physician counseling to promote the adoption of physical activity." *Prev Med* 25:225-33, 1996. (Class C)

Dietz W. "The role of lifestyle in health: the epidemiology and consequences of inactivity." *Proc Nutr Soc* 55:829-40, 1996. (Class R)

Pan XR, Li GW, Hu YH, et al. "Effects of diet and exercise in preventing NIDDM in people with impaired glucose tolerance: the Da Qing IGT and Diabetes Study." *Diabetes Care* 20:537-44, 1997. (Class A)

U.S. Preventive Services Task Force. "Counseling to promote a healthy diet." In Guide to clinical preventive services. DiGuiseppi C, Kamerow DB, eds. Baltimore: Williams & Wilkins, 1996: 625-42. (Class R)

3. Substance Use and Abuse

Burden of Suffering

Although the exact prevalence of alcohol and other drug abuse if difficult to measure with certainty, it has been estimated from population surveys that over 11 million Americans meet the diagnostic criteria for abuse or dependence.

Efficacy of Screening Tests

The most meaningful indicators of substance abuse are difficult to assess accurately during the clinical encounter. Physical findings cannot be relied on. The detection of alcohol and drug abuse by clinicians is often possible only through indirect methods. Asking the patient about the quantity and frequency of alcohol and other drug consumption is sometimes an important means of detecting substance abuse and dependence. There are, however, both limitations and variations in the accuracy of patient responses to such questions. A second screening method, a questionnaire, has been most extensively evaluated as a means of detecting alcohol abuse.

The provider should seek clues resulting from the consequences of substance abuse such as arrests for driving while intoxicated, divorce, continuing to drink despite medical consequences of drinking, evidence of intolerance, etc. When a provider is concerned about a patient's substance abuse, the provider should seek permission to discuss the issue with the spouse or significant other; and, when possible, arrange an office visit with both parties present.

U.S. Preventive Services Task Force. "Counseling to prevent motor vehicle injuries." In Guide to clinical preventive services: an assessment of the effectiveness of 169 interventions. DiGuiseppi C, Kamerow DB, eds. Baltimore: Williams & Wilkins, 1996: 643-57. (Class R)

Efficacy of Early Detection

Although early medical intervention is important in treating the systemic complications of acute intoxication or chronic abuse, there is less rigorous evidence that early intervention in asymptomatic persons is of benefit. There is consensus among experts that clinicians should be alert to the signs and symptoms of alcohol and other drug abuse and should routinely discuss patterns of use with all patients. Clinicians should pursue this diagnosis because of the enormous burden of suffering associated with abuse and dependence and the central etiologic role of alcohol and other drug abuse in several leading causes of death in the U.S. Even if treatment successes are infrequent, the benefits to

the population as a whole may be substantial. This is especially the case in adolescents and adults below age 45, for whom motor vehicle and other injuries are the leading causes of death and years of potential life lost.

Tobacco Use

See ICSI Tobacco Use Prevention and Cessation Guidelines.

Eberman KM, Patten CA, Dale LC. "Counseling patients to quit smoking." *Postgrad Med* 104:89-94, 1998. (Class R)

Kattapong VJ, Locher TL, Secker-Walker RH, et al. "Tobacco-cessation in patient counseling: American College of Preventive Medicine Practice Policy Statement." *Am J Prev Med* 15:160-62, 1998. (Class R)

U.S. Preventive Services Task Force. "Counseling to prevent tobacco use." In Guide to clinical preventive services: an assessment of the effectiveness of 169 interventions. DiGuiseppi C, Kamerow DB, eds. Baltimore: Williams & Wilkins, 1996: 597-609. (Class R)

4. Injury Prevention

In addition to the USPSTF, the work group also wishes to cite the following references that were used to determine the guideline recommendations concerning injury prevention:

Bass JL, Christoffel KK, Widome M, et al. "Childhood injury prevention counseling in primary care settings: a critical review of the literature." *Pediatr* 92:544-50, 1993. (Class R)

Quinlan KPA, Sacks JJ, Kresnow M-J. "Exposure to and complaince with pediatric injury prevention counseling-United States, 1994." *Pediatr* 102:E55, 1998. (Class D)

Motor Vehicle Safety

Burden of Suffering

Injuries are the fourth leading cause of death in the U.S. and the leading cause of death in persons under the age of 45. Motor vehicle injuries account for about half of these deaths. Motor vehicle injuries occur more commonly in males and in person aged 15-24. Motor vehicle injuries are the leading cause of death in persons aged 15-24.

Efficacy of Risk Reduction

Only about 46% of Americans use seat belts, and in 1986, 1.7 million persons were arrested for alcohol-impaired driving. About 40% of persons killed in motor vehicle crashes are intoxicated by alcohol. The proportion of fatally injured drivers having illegally high blood alcohol concentrations is highest for those aged 20-34. Use of occupant protection systems has been shown to reduce the risk of motor vehicle injury by about 40-50%. It has been estimated that the proper use of lap and shoulder belts can decrease the risk of moderate to serious injury to front seat occupants by 45-55% and can reduce crash mortality by 40-50%. Child safety seats also appear to be effective. It has been reported that unrestrained children are over 10 times as likely to die in a motor vehicle crash than are restrained children, although these data come from studies with important design limitations. Other studies suggest that child safety seats can reduce serious injury by 67% and mortality by 71%. Child restraints may also reduce non-crash injuries to child passengers by preventing falls both within and out of the vehicle. By wearing safety helmets, persons who operate or ride on motorcycles can reduce their risk

of injury or death from head trauma in the event of a crash. Head injury rates are reduced by about 75% in motorcyclists who wear safety helmets.

Efficacy of Counseling

There is generally little information from clinical studies on the ability of physicians to influence patients to refrain from driving while intoxicated or to use safety belts. Many studies have shown short-term improvements that are not sustained over time. Recommendations urging physicians to counsel patients to use occupant restraints have been issued by a number of organizations. Since motor vehicle injury represents one of the leading causes of death in the U.S. and years of potential life lost, interventions of even modest effectiveness are likely to have enormous public health implications.

American Academy of Pediatrics. "Selecting and using the most appropriate car safety seats for growing children: guidelines for counseling parents." *Pediatr* 97:761-62, 1996. (Class R)

U.S. Preventive Services Task Force. "Counseling to prevent motor vehicle injuries." In Guide to clinical preventive services: an assessment of the effectiveness of 169 interventions. DiGuiseppi C, Kamerow DB, eds. Baltimore: Williams & Wilkins, 1996: 643-57. (Class R)

Bicycle Safety

Burden of Suffering

Bicycle injuries account for nearly 550,000 emergency room visits and about 1000 deaths each year, mostly in children and adolescents. Between 50% and 75% of bicycle fatalities and hospitalizations are the results of head trauma; central nervous system injury is the primary cause of death in 90% of childhood fatalities from bicycle or pedestrian collisions with a motor vehicle.

Thompson RS, Rivara FP, Thompson DC. "A case-controlled study of the effectiveness of bicycle safety helmets." *N Engl J Med* 320:1361-67, 1989. (Class C)

Efficacy of Risk Reduction

There are few controlled studies examining the efficacy of safety helmets in preventing head injuries while riding bicycles, but recent data from a case-control study provide evidence that the risk of head injury among bicyclists is reduced as much as 80%. It is also known that safety helmets can reduce head injury rates among motorcyclists by 76%. States that have repealed mandatory motorcycle helmet laws have experienced significant increases in motorcycle fatalities. The second intervention, counseling bicyclists to avoid riding near motor vehicle traffic, is based on evidence that nearly 95% of bicycle fatalities occur as a result of a collision with a motor vehicle. Community efforts to separate bicyclists from motor vehicle traffic have met with success in preventing bicycle accidents, but the effectiveness of counseling bicyclists to use these routes remains unstudied. The third intervention, following safety rules, is not included in USPSTF, but is felt to be a useful addition to bicycle safety counseling.

U.S. Preventive Services Task Force. "Counseling to prevent household and recreational injuries." In Guide to clinical preventive services: an assessment of the effectiveness of 169 interventions. DiGuiseppi C, Kamerow DB, eds. Baltimore: Williams & Wilkins, 1996: 659-85. (Class R)

Fire Injury Prevention

Burden of Suffering

Fires and burns are the third leading cause of unintentional injury-related death. Most injuries and 75-90% of deaths from fires occur in residential fires.

Efficacy of Risk Reduction

Smoke detectors provide the most efficacious means of preventing deaths in residential fires. Fire department statistics indicate that death in a residential fire is two to three times more likely in homes without smoke detectors than in those with such devices.

Efficacy of Counseling

There is no evidence of the magnitude of reduction in fire injuries achieved by advising patients to install and test smoke detectors. It is known, for example, that smoke detectors often fail to operate due to incorrect installation or inadequate testing, and some occupants may be unable to hear or respond to the alarm signal. For these reasons, it is important that smoke alarm counseling emphasize the importance of correct installation and periodic testing to ensure proper operation. Cigarette smoking causes about 25% of residential fires, usually through unintentional ignition of bedding or upholstery, and many advocate counseling regarding careless smoking practices and the promotion of self-extinguishing cigarettes.

U.S. Preventive Services Task Force. "Counseling to prevent household and recreational injuries." In Guide to clinical preventive services: an assessment of the effectiveness of 169 interventions. DiGuiseppi C, Kamerow DB, eds. Baltimore: Williams & Wilkins, 1996: 659-85. (Class R)

Poisoning Prevention

Efficacy of Risk Reduction

Childhood poisoning can be prevented by placing medications in child-resistant containers. Federal legislation requiring such containers for aspirin, acetaminophen, prescription drugs and household chemicals has been associated with a subsequent decrease in childhood poisoning from these substances.

Efficacy of Counseling

Education has been shown to motivate parents to obtain syrup of ipecac, to display poison control center telephone numbers, and to learn more about the proper use of ipecac. Other studies have found counseling to be ineffective in promoting safety. Controlled studies of counseling parents to prevent childhood poisoning have not shown a significant effect on poison injury rates.

Krenzelok EP, McGuigan M, Lheur P. "Position statement: ipecac syrup: American Academy of Clinical Toxicology; European Association of Poisons Centres and Clinical Toxicologists." *J Toxicol-Clin Toxicol* 35:699-709, 1997. (Class R)

U.S. Preventive Services Task Force. "Counseling to prevent household and recreational injuries." In Guide to clinical preventive services: an assessment of the effectiveness of 169 interventions. DiGuiseppi C, Kamerow DB, eds. Baltimore: Williams & Wilkins, 1996: 659-85. (Class R)

Hot Water Burns

Burden of Suffering

Hot tap water burns account for 2600 hospitalizations each year.

Effectiveness of Counseling

Hot water burns can be prevented by setting household water heaters at 120 degrees Fahrenheit. The AAP also recommends that this counseling message be provided. A randomized controlled trial found that couples who received information on burn prevention during well-child care classes were

more likely to have their hot water heaters set at 130 F or lower when checked by investigators during a home visit. The USPSTF does not indicate that this counseling message should also be given to the elderly, but it is felt that the message would equally apply to the elderly as well as to parents of young children.

U.S. Preventive Services Task Force. "Counseling to prevent household and recreational injuries." In Guide to clinical preventive services: an assessment of the effectiveness of 169 interventions. DiGuiseppi C, Kamerow DB, eds. Baltimore: Williams & Wilkins, 1996: 659-85. (Class R)

Water Safety

Burden of Suffering

The patients at greatest risk for drowning are small children (aged 1-3) and young males aged 15-24). Drowning is the second leading cause of death in adolescents.

Effectiveness of Risk Reduction

The causes of drowning, and thus preventive strategies, differ with the age of the patient. In small children, about 60-80% of drownings occur in swimming pools, usually located in the back yard of the victim's family. Drownings of adolescents and adults occur under different circumstances. Most drownings occur in lakes, rivers, and ponds in association with such water activities as swimming, wading, diving, rafting and fishing. Intoxication by alcohol or other drugs is common in both drownings and boating mishaps; about half of all victims have a significant blood alcohol level, and about 10% have evidence of other drugs with central nervous system effects.

Efficacy of Counseling

Discouraging swimming or boating while intoxicated would therefore appear to be appropriate, but there has been little research on the impact of such a clinical intervention. About 82% of boating-related drownings are associated with non-use or inappropriate use of personal flotation devices, but there are few data on the impact of promoting the proper use of these devices. Swimming lessons may offer some protection against drowning, but this has also never been proved convincingly. None of the specific counseling messages recommended by the ICSI guideline are recommended in USPSTF, but were felt to be useful messages for water safety counseling.

U.S. Preventive Services Task Force. "Counseling to prevent household and recreational injuries." In Guide to clinical preventive services: an assessment of the effectiveness of 169 interventions. DiGuiseppi C, Kamerow DB, eds. Baltimore: Williams & Wilkins, 1996: 659-85. (Class R)

Fall Prevention

Burden of Suffering

Falls are the leading cause of non-fatal injuries in the U.S. Over 70% of deaths due to falls occur in persons aged 65 and over, making falls the leading cause of unintentional injury death in this age group. The death rate due to falls in the general population is 5.1 per 100,000 persons. In the elderly, in whom complications such as hip fracture can be severe, the death rate per 100,000 increases with age, from 10.2 for those aged 65-74, to 147.0 for persons aged 85 and over. In addition to falls in the elderly, falls also occur in younger persons, especially children under age 5.

Efficacy of Counseling

Physiological changes and environmental agents are the principal risk factors for falls in older persons. Physiological risk factors include postural instability, gait disturbances, diminished muscle strength and proprioception, poor vision, and medications. Environmental risk factors include stairs,

pavement irregularities, slippery surfaces, inadequate lighting, unexpected objects, low chairs, and incorrect footwear. Hard surfaces such as concrete increase the risk of fracture when a fall occurs. These risk factors serve as the basis for recommended interventions to prevent falls: exercise to enhance muscle strength, monitoring of medications, balance and gait training, and counseling to correct environmental hazards. The efficacy of these measures has not been fully evaluated. There is evidence, however, that some interventions can reduce fall rates in the institutional setting. Falls in children are often from stairs or furniture; collapsible gates have been advocated as a means of protecting children from stairways. Although the efficacy of stairway gates has not been studied, there is evidence that window guards can reduce child falls from apartment windows. Counseling parents to prevent walker injuries and to prevent falls from changing tables are not included in USPSTF, but are viewed as prudent additions to the guideline.

U.S. Preventive Services Task Force. "Counseling to prevent household and recreational injuries." In Guide to clinical preventive services: an assessment of the effectiveness of 169 interventions. DiGuiseppi C, Kamerow DB, eds. Baltimore: Williams & Wilkins, 1996: 659-85. (Class R)

Choking

Burden of Suffering

In 1990, 261 children under the age of 5 in the U.S. died due to choking.

National Safety Council. Accident Facts. 1993.

Efficacy of Counseling

The USPSTF does not include recommendations concerning choking prevention counseling, but these counseling messages are viewed as prudent additions to the guideline by the work group.

Firearm Injury Prevention

Burden of Suffering

Firearm injuries result in about 1800 unintentional deaths each year (5% of all firearm fatalities) and five times as many non-fatal injuries.

Efficacy of Counseling

Most unintentional injuries from firearms involve adolescent and young adult males, and about 65-78% of these injuries occur in or around the home. Over 90% of firearm accidents involving children occur at home; a study in children aged 0-14 found that 40% involved a firearm stored in the room where the shooting occurred. USPSTF notes that the potential preventive strategies to prevent firearm injuries, such as counseling firearm owners to store weapons unloaded and in a locked compartment, would appear to be effective but have been inadequately studied.

U.S. Preventive Services Task Force. "Counseling to prevent household and recreational injuries." In Guide to clinical preventive services: an assessment of the effectiveness of 169 interventions. DiGuiseppi C, Kamerow DB, eds. Baltimore: Williams & Wilkins, 1996: 659-85. (Class R)

5. Violence and Abuse Prevention

Office-Based Primary Prevention

In General

In planning an office-based prevention program, those involved must be committed to promoting and modeling non-violent behavior. Just as we have banned smoking and smoking advertisements from our waiting rooms, we should monitor and eliminate the hidden messages that denigrate others, the "funny" threats of violence, and any racist, sexist, or homophobic comments. Listen to conversations and note the frequency of violent metaphors. Violence is deeply rooted in our culture. By raising our awareness of this we will start attending to the subtle clues that patients offer us.

In formulating and implementing abuse prevention programs, there must also be sensitivity to cultural differences in values and behavioral norms across the many ethnic and racial groups in the area.

U.S. Department of Health and Human Services, Public Health Service. "Violent and abusive behavior." In Healthy people 2000: National health promotion and disease prevention objectives, Ch 7. 1991:227-47. (Class R)

When the health visit involves a newborn

Time should be taken to explore parenting skills and issues. Topics such as colic, awakening at night, separation anxiety, normal exploratory behavior, normal negativism, normal poor appetite, and toilet training resistance should be addressed as stresses for parents, but normal anticipated behaviors of infants.

Positive alternatives to spanking, hitting, and yelling should be offered. Offices should have patient education materials to hand out sequentially as topics are discussed, as well as a lending library.

For parents using day care, physicians should routinely ask about the day care setting, listen for any parental concerns, and discuss those concerns fully. Does the parent visit to see that their wishes regarding general child care and discipline methods are being followed?

When the health visit involves a child 2 to 6 years of age

Take a violence history from the parent. ("In the last month how many episodes of yelling fights have occurred in the household? Were there any episodes of pushing, shoving, or hitting? If so, did any injury occur?")

Stringham P, Weitzman M. "Violence counseling in the routine health care of adolescents." *J Adolesc Health Care* 9:389-93, 1988. (Class R)

Ask about the types of punishment and discipline employed by the parents and for what offenses. Not all of us have children, but we can work with books such as Without Spanking or Spoiling: A Practical Approach to Toddler and Preschool Guidance to gain appreciation for the challenges of parenting.

Ask about the amount of television viewed by the child, and ask whether the child's television watching is monitored by an adult.

American Academy of Pediatrics. "Television and the family." AAP: 1999. (Class not assignable)

Strasburger VC. "Children, adolescents, and television." *Pediatr Rev* 13:144-51, 1992. (Class R)

Ask if weapons are stored in the home and if so, how they are stored. You may choose to share statistics such as "guns are six times more likely to kill or injure a member of the owner's household than an intruding criminal."

Strasburger VC. "Children, adolescents, and television." *Pediatr Rev* 13:144-51, 1992. (Class R)

Provide information on war toys.

Encourage parents to give the child permission to say no to advances and to teach children about "private places."

Jenny C, Sutherland SE, Sandahl BB. "Developmental approach to preventing the sexual abuse of children." *Pediatr* 78:1034-38, 1986. (Class R)

When the health visit involves a 6 to 11 year old

Ask the parent and the patient about the number of yelling fights in the past month and if there were and episodes of pushing, shoving, or hitting.

Stringham P, Weitzman M. "Violence counseling in the routine health care of adolescents." *J Adolesc Health Care* 9:389-93, 1988. (Class R)

Encourage monitoring of play activity, television, and video watching in order to emphasize nonviolent behaviors.

Strasburger VC. "Children, adolescents, and television." *Pediatr Rev* 13:144-51, 1992. (Class R)

Before examining certain areas on the child, role model asking permission to touch their body. Reinforce self-protective behaviors and the difference between good and bad touching. Encourage children to talk about frightening experiences.

Jenny C, Sutherland SE, Sandahl BB. "Developmental approach to preventing the sexual abuse of children." *Pediatr* 78:1034-38, 1986. (Class R)

Talk with the child about street fighting and the consequences of fighting. Appeal to the child's desire to help friends and offer concrete advice about how to help friends avoid fights by using calming language. ("We don't have anything against you. We don't want to fight about this.")

Stringham P, Weitzman M. "Violence counseling in the routine health care of adolescents." *J Adolesc Health Care* 9:389-93, 1988. (Class R)

Ask if weapons are kept in the home and if so, ask how they are stored.

Stringham P, Weitzman M. "Violence counseling in the routine health care of adolescents." *J Adolesc Health Care* 9:389-93, 1988. (Class R)

Encourage frequent signals of affection from parent toward child (patting on the back, roughing up hair) and suggest eating meals together as a family.

When the health visit involves a 12 to 18 Year Old

Teens should be encouraged to set boundaries on their sexual activities according to their comfort level and to be clear about these boundaries with their partners. The influence of drugs and alcohol in this setting can also be discussed. Recognizing that many adolescents believe that force is appropriate in sexual relations and that it is the male's right to be aggressive, the provider may want to explore assumptions held about traditional role models.

U.S. Department of Health and Human Services, Public Health Service. "Violent and Abusive Behavior." In Healthy people 2000: National health promotion and disease prevention objectives, Ch 7. 1991:227-47. (Class R)

Discuss the adolescent's choice of music, video games, movies, and television shows. Interests and alternative activities can be explored.

Strasburger VC. "Children, adolescents, and television." *Pediatr Rev* 13:144-51, 1992. (Class R)

A violence history should be taken. Assess the number of physical fights in which the patient was involved in the past year, assess the patient's exposure to weapons, and ask if the patient knows how to avoid fights. Ask about any violence within dating relationships and forced sexual activity. Ask about any history of abuse. Ask about depression and thoughts of suicide.

Stringham P, Weitzman M. "Violence counseling in the routine health care of adolescents." *J Adolesc Health Care* 9:389-93, 1988. (Class R)

Ask the patient for solutions to potentially violent situations. Offer suggestions such as "If you have a problem with me I'll talk to you, but I don't want to fight about this"; or "This isn't worth fighting about" as specific ways to stop potentially violent arguments.

Stringham P, Weitzman M. "Violence counseling in the routine health care of adolescents." *J Adolesc Health Care* 9:389-93, 1988. (Class R)

When the health visit involves an adult

Routinely screening women for partner abuse can heighten the awareness of those who have not been in abusive relationships. "These are questions I ask of all female patients: When you and your partner argue, is there ever any put downs or name calling? Is your partner ever extremely jealous? Does your partner ever control who you see, how you spend money, where you go? Have you ever been hit, pushed, restrained, or choked during an argument? I ask these questions because unfortunately controlling and abusive relationships are common. No one deserves this type of treatment. Because it can be difficult to share this with friends or family, I hope this office setting is a safe place to discuss these issues."

Issues of firearm safety and violent media exposure can be explored. The importance of showing frequent affection toward young children and eating meals together can be shared with parents.

Recommendations of Others

USPSTF

Insufficient evidence exists to recommend for or against the use of a specific screening instrument for family violence, but including a few direct questions about abuse as part of routine history may be recommended on other grounds.

U.S. Preventive Services Task Force. "Family violence." Guide to clinical preventive services: an assessment of the effectiveness of 169 interventions. Baltimore, Maryland: Williams & Wilkins, 1989:562. (Class R)

Be alert for physical findings of child abuse.

Report suspected cases of child abuse or neglect.

Be alert for physical abuse in adults, especially pregnant women and the elderly.

Ask males age 15-24 about previous violent behavior, current drug/ETOH use, availability of guns.

Counsel those with evidence of violent behavior about nonviolent alternatives to conflict resolution and risks of violent injury associated with easy access to firearms and drugs.

Canadian Task Force

Violence and firearm injury not considered.

Stress - elicit history of marital/sexual problems (age 18-64).

1993 update - Primary Prevention of Child Maltreatment:

Insufficient evidence to justify use of questionnaires to predict child abuse.

Physicians should know the risk indicators for child maltreatment.

Include home visitation referral during perinatal period for families of low socioeconomic status, single parents, or teenage parents.

No good evidence to include or exclude increased contact with the pediatrician, extended postpartum hospital contact, use of drop-in centers or parent training programs.

No guidelines offered regarding usefulness of sexual abuse/abduction programs for kids.

AMA Counsel on Scientific Affairs

Recommends routine screening of all adult females and the elderly.

Prevention of Child Maltreatment

Screening procedures (checklists, self-administered questionnaires, standardized interviews or clinical judgment) used to identify individuals at risk of maltreating children have not been found effective. Most experts recommend excluding their use from the periodic health examination.

MacMillan HL, MacMillan JH, Offord DR, et al. "Periodic health examination, 1993 update: 1. Primary prevention of child maltreatment." *Can Med Assoc J* 148:151-63, 1993. (Class R)

Research has shown that home visitation during infancy has led to decreased reports of abuse and neglect, fewer emergency room visits, fewer accidents and fewer hospital admissions. This decrease was particularly noted to be of benefit among teenage, unmarried, and poor parents. For this reason, the Canadian Task Force has included home visitation referrals for selected populations in their 1993 recommendations for primary prevention of child maltreatment. Regular home visits provide social support, parenting and life skills training. Depending on the community, this level of support may be organized through the physician's office. For many years, family physicians in small rural counties made it a practice to visit new mothers at home. Others have had office staff function as home visitors or used selected volunteers. Metropolitan areas generally rely on public health nurses.

Bethea L. "Primary prevention of child abuse." *Am Fam Phys* 59:1577-85, 1999. (Class R)

Dubowitz H. "Pediatrician's role in preventing child maltreatment." *Pediatr Clin North Am* 37:989-1002, 1990. (Class R)

Elliot BA. "Prevention of violence." *Prim Care* 20:277-88, 1993. (Class R)

MacMillan HL, MacMillan JH, Offord DR, et al. "Periodic health examination, 1993 update: 1. Primary prevention of child maltreatment." *Can Med Assoc J* 148:151-63, 1993. (Class R)

Olds DL, Henderson CR, Chamberlin R, et al. "Preventing child abuse and neglect: a randomized trial of nurse home visitation." *Pediatr* 78:65-78, 1986. (Class A)

Burden of Suffering

- 2.7 million children in 1.3 million families reported in 1991

  43% substantiated

  24% physical abuse

  15.5% sexual abuse

  47% neglect

  Many episodes go unreported

- 5,000 children die due to maltreatment each year
- Minnesota department of education survey 1988-9

  14% girls, 10% boys report physical abuse

  5% girls, 1% boys report sexual abuse by family member

  11% girls, 2% boys report sexual abuse by non-family member

  16% girls report forced sexual contact by date or friend

- Estimated annual cost of caring for children seriously hurt approaches $500 million. No price tag for the potential lifelong emotional/psychological trauma.

U.S. Preventive Services Task Force. Guide to clinical preventive services: an assessment of the effectiveness of 169 interventions. Baltimore, Maryland: Williams & Wilkins, 1989. (Class R)

U.S. Department of Health and Human Services, Public Health Service. "Violent and Abusive Behavior." In Healthy people 2000: National health promotion and disease prevention objectives, Ch 7. 1991:227-47. (Class R)

Sugg NK, Inui T. "Primary care physicians' response to domestic violence: opening Pandora's Box." *JAMA* 267:3157-60, 1992. (Class D)

Effectiveness of Screening

There has been intensive investigation over the past 20 years towards identifying people at risk of committing physical child abuse or neglect. Methods of screening include self-administered checklists or questionnaires and standardized interviews (e.g., Family Stress Checklist; Dunedin Family Services Indicator; Child Abuse Potential Inventory; Michigan Screening Profile of Parenting). The major problems with these instruments are the high false-positive rate and the potential harm of mislabeling people as child abusers. For this reason most advocate that efforts at predicting high risk individuals be abandoned in favor of identifying high risk communities.

Dubowitz H. "Pediatrician's role in preventing child maltreatment." *Pediatr Clin North Am* 37:989-1002, 1990. (Class R)

Dubowitz H. "Prevention of child maltreatment: what is known." *Pediatr* 83:570-77, 1989. (Class R)

MacMillan HL, MacMillan JH, Offord DR, et al. "Periodic health examination, 1993 update: 1. Primary prevention of child maltreatment." *Can Med Assoc J* 148:151-63, 1993. (Class R)

Olds DL, Henderson CR, Chamberlin R, et al. "Preventing child abuse and neglect: a randomized trial of nurse home visitation." *Pediatr* 78:65-78, 1986. (Class A)

Research into risk indicators has been conducted primarily in the area of physical abuse and sexual abuse. Limited information is available about neglect.

MacMillan HL, MacMillan JH, Offord DR, et al. "Periodic health examination, 1993 update: 1. Primary prevention of child maltreatment." *Can Med Assoc J* 148:151-63, 1993. (Class R)

Risk indictors for physical abuse:

- low socioeconomic status
- low maternal age
- large family
- single-parent family
- parent's childhood experience with physical maltreatment
- spousal violence
- social isolation/lack of social support
- unplanned pregnancy or negative attitude towards pregnancy

Risk indicators for sexual abuse:

- family without natural parent
- poor marital relationship between parents
- stepfather present
- unhappy family life

Effectiveness of Preventive Interventions

Not studied but suggested by many experts to make greater use of the routine well child visits to explore issues related to violence and abuse (e.g., constructive alternatives to spanking, violence history, sex education, TV viewing).

Dubowitz H. "Pediatrician's role in preventing child maltreatment." *Pediatr Clin North Am* 37:989-1002, 1990. (Class R)

Elliot BA. "Prevention of violence." *Prim Care* 20:277-88, 1993. (Class R)

Jenny C, Sutherland SE, Sandahl BB. "Developmental approach to preventing the sexual abuse of children." *Pediatr* 78:1034-38, 1986. (Class R)

Stringham P, Weitzman M. "Violence counseling in the routine health care of adolescents." *J Adolesc Health Care* 9:389-93, 1988. (Class R)

Prevention of Partner Abuse

Identifying victims of partner abuse is best accomplished by asking simple, direct questions in a non judgmental manner and a confidential setting. Intervention begins with this important encounter, for even if the woman is not yet ready to leave the relationship or take other action, the recognition, validation, and concern confirm the seriousness of the problem and the need to solve it. Optimal care

will include a safety assessment and explanation of community resources which can provide safety, advocacy, and support. The AMA Diagnostic and Treatment Guidelines on Domestic Violence describe in detail techniques for identifying and intervening for partner abuse.

American Medical Association. "American Medical Association Diagnostic and Treatment Guidelines on Domestic Violence." *Arch Fam Med* 1:39-47, 1992. (Class R)

Hamberger LK, Saunders DG, Hovey M. "Prevalence of domestic violence in community practice and rate of physician inquiry." *Fam Med* 24:283-7, 1992. (Class D)

Friedman LS, Samet JH, Roberts MS, et al. "Inquiry about victimization experiences - a survey of patient preferences and physician practices." *Arch Int Med* 152:1186-90, 1992. (Class D)

Burden of Suffering

- 95% of victims of domestic violence are women.
- 1/4 of all women will be physically assaulted by partner/ex-partner during lifetime.
- 2-4 million women abused each year.
- Up to 35% of women seeking care in ER are there for reasons related to battering.
- Victimization leads to increased utilization of health care systems (Koss).
- 52% of female murder victims were killed by current partner or ex-husband.
- 10% of women who have ever been married report being raped by their husbands.
- Battering causes or is associated with many medical problems including injuries, chronic pain, depression, anxiety, pregnancy complications, drug dependency, suicidality, and child maltreatment. At the work place it can lead to absenteeism, loss of productivity, and loss of creativity.

American Medical Association Council on Scientific Affairs. "Violence against women - relevance for medical practitioners." *JAMA* 267:3184-89, 1992. (Class R)

American Medical Association. "American Medical Association Diagnostic and Treatment Guidelines on Domestic Violence." *Arch Fam Med* 1:39-47, 1992. (Class R)

U.S. Department of Health and Human Services, Public Health Service. "Violent and Abusive Behavior." In Healthy people 2000: National health promotion and disease prevention objectives, Ch 7. 1991:227-47. (Class R)

U.S. Preventive Services Task Force. Guide to clinical preventive services: an assessment of the effectiveness of 169 interventions. Baltimore, Maryland: Williams & Wilkins, 1989. (Class R)

Effectiveness of Screening

Studies show that patients favor inquiries about abuse, believe that doctors can help with these problems, and will share this information if asked directly.

Hamberger LK, Saunders DG, Hovey M. "Prevalence of domestic violence in community practice and rate of physician inquiry." *Fam Med* 24:283-7, 1992. (Class D)

Friedman LS, Samet JH, Roberts MS, et al. "Inquiry about victimization experiences - a survey of patient preferences and physician practices." *Arch Int Med* 152:1186-90, 1992. (Class D)

However, battered women are identified less than 10% of the time by physicians according to some studies. We must recognize that there are many barriers to revealing or identifying abuse, including a victim's fear that the physician will try to persuade her to do something she is not ready to do (Hadley).

Sugg NK, Inui T. "Primary care physicians' response to domestic violence: opening Pandora's Box." *JAMA* 267:3157-60, 1992. (Class D)

This should not stop a physician from asking questions about partner abuse. As emphasized in the AMA guidelines, routine questions about abuse will not only identify women who currently are abused, but will also leave the door open to those who choose not to disclose at that time. The fact that a provider is concerned and believes battering is a reality will make an impression and reinforce a woman's capacity to seek help when she feels ready and is able to do so. Routine questioning also serves to assess the safety of women who have not been in abusive relationships.

Effectiveness of Preventive Interventions

No outcome studies exist. There are, however, many various primary prevention activities in Minnesota addressing home and community violence including:

Turn Off the Violence Administered by Citizens Council - Contact: Jackie Turner (612) 348-6539.

Ramsey County Initiative for Violence Free Families and Communities - Contact: Don Gault (651) 266-2404 or Shirley Pierce (651) 266-8020.

Hennepin County Community Prevention Coalition - Contact: Lois Gunderson (612) 348-6122.

Partners for Violence Prevention (in St. Paul's West 7th Community) - Contact: Andrea Marboe (651) 220-8532.

Stop the Violence Campaign - Minnesota Medical Association - Contact: Lorrie Holmgren (612) 378-1875 or (800) 342-5662.

School-Based Conflict Resolutions Programs - Contact your local school district for information.

Early Childhood and Family Education - Contact your local school district for information.

"You Are the One Who Can Make the Peace" campaign - Drug Policy and Prevention Office, Minnesota State Office - Contact: Ellie Webster (651) 297-7311.

Preventing Elder Abuse

Identifying victims of elder abuse is best accomplished by asking simple, direct questions in a non judgmental manner. If maltreatment is suspected, report it to adult protective services. Assess the victim's safety and coordinate interventions with adult protection services. Management should be guided by choosing the alternatives that least restrict the patient's independence and fulfill state-mandated reporting requirements. Intervention will depend on the patient's cognitive status and decision-making capability and on whether the maltreatment is intentional or unintentional. Details on the assessment and intervention of elder abuse are well described in the AMA Diagnostic and Treatment Guidelines on Elder Abuse and Neglect. As caring for an elderly person at home is inherently stressful, abusive situations may be prevented by providing support to overburdened caregivers. Health care providers can suggest home health services, caregiver support groups, or respite care.

O'Malley TA, Everitt DE, O'Malley HC, et al. "Identifying and preventing family-mediated abuse and neglect of elderly persons." *Ann Intern Med* 98:998-1005, 1983. (Class R)

Burden of Suffering

- 1.5-2 million adults older than 60 abused annually.
- Only 1 in 14 cases reported to a public agency.

Aravanis SC, Adelman RD, Breckman R, et al. "Diagnostic and treatment guidelines on elder abuse and neglect." *Arch Fam Med* 2:371-88, 1992. (Class R)

U.S. Department of Health and Human Services, Public Health Service. "Violent and Abusive Behavior." In Healthy people 2000: National health promotion and disease prevention objectives, Ch 7. 1991:227-47. (Class R)

U.S. Preventive Services Task Force. Guide to clinical preventive services: an assessment of the effectiveness of 169 interventions. DiGuiseppi C, Kamerow DB, eds. Baltimore: Williams & Wilkins, 1996: 659-85. (Class R)

Effectiveness of Screening and Preventive Intervention

Very little data exist. The AMA guidelines suggest that physicians play an active role in the assessment, intervention, and prevention of elder abuse. Doctors are asked to incorporate routine screening questions related to this abuse into their daily practices. Doctors are asked to provide support to overburdened caregivers, e.g., suggest home-care services, caregiver support groups, and respite care.

Aravanis SC, Adelman RD, Breckman R, et al. "Diagnostic and treatment guidelines on elder abuse and neglect." *Arch Fam Med* 2:371-88, 1992. (Class R)

Firearm Injury/ Weapons/ Homicide/ Suicide

Burden of Suffering

- Firearms cause 33,000 deaths annually (second leading cause of fatal injuries).
- Of the 21,000 homicides annually, 60% involve firearms.
- Firearms are associated with 55% of all suicides.
- 1 in 21 black males dies from homicide.
- Homicide is the leading cause of death of black males age 15-24.
- National survey on weapon-carrying among high school students (1990):

31.5% of males, 8.1% of females report carrying a weapon at least once during previous 30 days. 55% carry knife/razor, 24% clubs, 20% firearms.

U.S. Department of Health and Human Services, Public Health Service. "Violent and Abusive Behavior." In Healthy people 2000: National health promotion and disease prevention objectives, Ch 7. 1991:227-47. (Class R)

U.S. Department of Health and Human Services. "Weapon Carrying Among High School Students - United States, 1990." *MMWR* 40:681-84, 1991. (Class R)

U.S. Preventive Services Task Force. "Counseling to prevent household and recreational injuries." Guide to clinical preventive services: an assessment of the effectiveness of 169 interventions. DiGuiseppi C, Kamerow DB, eds. Baltimore: Williams & Wilkins, 1996: 659-85. (Class R)

Effectiveness of Screening and Preventive Interventions

No outcome study data available.

USPSTF: Recommends asking males age 15-24 about the availability of guns and/or weapons.

CDC: Recommends efforts to reduce immediate access to loaded firearms, including storing weapons and ammunition separately and keeping both locked.

Other Interesting Statistics

Guns are 6 times more likely to kill or injure a member of the owner's household than an intruding criminal.

Toy guns cause 1,500 injuries/year.

Sales of toy guns = $100 million.

Weapons appear 9 times/hour during prime time television.

Strasburger VC. "Children, adolescents, and television." *Pediatr Rev* 13:144-51, 1992. (Class R)

6. Sexual Practices

Unintended Pregnancy Prevention

Burden of Suffering

The exact prevalence of unwanted pregnancies in the U.S. is uncertain due to difficulties in data collection, but it is thought to represent a significant proportion of pregnancies, especially among adolescent and young adult parents.

Efficacy of Risk Reduction and Counseling

Initiation of sexual activity at a young age, a primary risk factor for unintended pregnancy, is common in the U.S. Over half of unmarried American adolescents in the U.S. report having had sexual intercourse by age 18. Without contraception, 89% of heterosexual couples who engage in regular sexual intercourse will conceive within one year. Complete sexual abstinence is the most effective form of contraception. In persons who are sexually active, selection of an appropriate method of birth control must take into consideration the personal preferences, religious beliefs, and abilities of the patient, the nature of the relationship with the partner and the attitudes and legal restrictions of society. Many women in the U.S. do not have access to family planning clinics or they seek their care elsewhere. Since clinicians have access to a large proportion of persons at risk for unintended pregnancy, counseling regarding the use of contraceptive methods could have a significant public health impact if performed effectively. However, the effectiveness of counseling has been studied primarily in the context of sex education in schools and family planning clinics. Such studies have found that young women who attend a sex education course in school use contraceptives more effectively, but the designs of these studies do not permit the conclusion that sex education itself is responsible for the outcome or that sex education performed by clinicians is equally as effective. The Canadian Task Force, ACOG and the Society for Adolescent Medicine have also recommended counseling to prevent unwanted pregnancy in the periodic health exam of adolescents. USPSTF concurs with the first two guideline recommendations, that of taking a sexual history and informing the patient of ways to prevent unwanted pregnancy. The third recommendation, advising the patient of the health benefits of contraceptive use, is not included in USPSTF recommendations, but was felt by the work group to be an important counseling message.

U.S. Preventive Services Task Force. "Counseling to prevent unintended pregnancy." In Guide to clinical preventive services: an assessment of the effectiveness of 169 interventions. DiGuiseppi C, Kamerow DB, eds. Baltimore: Williams & Wilkins, 1996: 739-53. (Class R)

Sexually Transmitted Disease Prevention

Each year in the U.S. there are about 3-4 million cases of chlamydial infection, 2 million cases of gonorrhea, and over 35,000 cases of primary and secondary syphilis. Primary episodes of genital herpes occur each year in approximately 270,000 Americans, and nearly 20 million persons are already infected and suffering recurrent episodes. These diseases are associated with significant morbidity. An estimated 500,000 to 1 million persons in the U.S. have been infected with Hepatitis B virus, and an estimated 1-1.5 million persons are infected with the HIV virus.

Efficacy of Risk Reduction and Counseling

The most efficacious means of reducing the risk of acquiring AIDS or other sexually transmitted diseases through sexual contact is either abstinence from sexual relations or maintenance of a mutually monogamous sexual relationship with an uninfected partner. Condoms have been shown in the laboratory to prevent transmission of chlamydia trachomatis, herpes simplex virus, trichomonas, cytomegalovirus and HIV. Even under optimal conditions, however, condoms are not always efficacious in preventing transmission. Condom failures occur at an estimated rate of 10-15% either as a result of product failure or as a result of incorrect or inconsistent use. There have been few studies examining the effectiveness of physicians in influencing the sexual behavior of patients. Studies of clinic-based educational programs, which in some cases have included physician counseling as a component, have reported increased rate of return for test-of-cure and reduced incidence of certain sexually transmitted diseases, but these studies involved select populations and provided little evidence of change in sexual behavior. Although it has not been proven that physicians can change the sexual behavior of patients, there is evidence that the frequency of high-risk behaviors can be reduced in response to information provided through public education. Clinicians can play an important role in asymptomatic persons by reinforcing and clarifying educational messages, providing literature and community resource references and dispelling misconceptions about unproven modes of transmission.

U.S. Preventive Services Task Force. "Counseling to prevent unintended pregnancy." In Guide to clinical preventive services: an assessment of the effectiveness of 169 interventions. DiGuiseppi C, Kamerow DB, eds. Baltimore: Williams & Wilkins, 1996: 739-53. (Class R)

7. Mental Health awareness

There is no scientific documentation that educating and counseling the general population on depression, anxiety or stress identification is or is not effective. This lack of evidence can be used neither to support nor to discredit counseling, as these issues are inherently difficult to study and have not been adequately examined. The USPSTF recommends only that the provider "Remain Alert For" depression, abnormal bereavement and suicide risk factors but makes no recommendations regarding general counseling.

Recognizing the above stated limitations of knowledge, the guideline group feels that providing mental health education and counseling for depression, anxiety and stress management is reasonable for the reasons listed below. Scientific validation for or against this recommendation will hopefully be available in the future.

1. The burden of suffering and prevalence are significant as noted above.
2. Effective treatments are available.
3. The diagnoses can be difficult and are often overlooked by medical providers, in part due to lack of knowledge of home/work behaviors and events. Common mental health concerns frequently present to primary care providers as medical concerns.
4. The diagnoses are often overlooked by the affected individual and his/her family and friends. This is due in part to the inherent lack of introspection present with mental illness and stress but also is due to the lack of knowledge regarding these illnesses and their presentations.
5. Affected individuals and their family and friends may help identify potential signs of problems.
6. The messages regarding depression, anxiety and stress are relatively simple and easy to deliver with written materials.

U.S. Preventive Services Task Force. "Screening for depression." Guide to clinical preventive services: an assessment of the effectiveness of 169 interventions. DiGuiseppi C, Kamerow DB, eds. Baltimore: Williams & Wilkins, 1996: 541-46. (Class R)

U.S. Department of Health and Human Services, Public Health Service. Healthy People 2000. National Health Promotion and Disease Prevention Objectives, Ch 7. 1991:227-47. (Class R)

Depression and Anxiety Awareness

Refer to the Discussion and References section in the ICSI Major Depression, Panic Disorder and Generalized Anxiety Disorder in Adults guideline.

U.S. Preventive Services Task Force. "Screening for depression." Guide to clinical preventive services: an assessment of the effectiveness of 169 interventions. DiGuiseppi C, Kamerow DB, eds. Baltimore: Williams & Wilkins, 1996: 541-46. (Class R)

Hoyl MT, Alessi CA, Harker JO, et al. "Development and testing of a 5-item version of the geriatric depression scale." *JAG* 47:873-78, 1999. (Class C)

Coping Skills/ Stress Reduction

Burden of Suffering

The financial impact of stress on corporate America is staggering: $ 68 billion annually in lost productivity due to absences from stress, stress claims costing up to 10 percent of a company's earnings, and health care professionals reporting that up to 90% of patients complain of stress-related symptoms and disorders.

Gibson VM. "Stress in the workplace: a hidden cost factor." *HR Focus* Jan:15, 1993. (Class R)

It has been suggested that the effects of stress are related to a variety of clinically defined illnesses such as anxiety, depression, eating disorders, gastrointestinal and cardiovascular illnesses, immune disorders, suicide and other forms of aggression, substance abuse, and intentional and unintentional injuries.

U.S. Department of Health and Human Services, Public Health Service. "Mental health and mental disorders." In Healthy people 2000: National health promotion and disease prevention objectives. 1991:208-24. (Class R)

Evidence suggests that multicomponent behavioral medicine treatments are cost-effective on all dimensions reviewed.

Schneider CJ. "Cost effectiveness of biofeedback and behavioral medicine treatments: a review of the literature." *Biofeedback Self Regul* 12:71-92, 1987. (Class R)

The experiences of Kaiser Permanente demonstrate that when all barriers to physical health care are removed, the system becomes overloaded with 60% or more of physician visits by patients manifesting symptoms of emotional distress. When psychotherapy is properly provided within a comprehensive health system, the costs of providing the benefit are more than offset by the savings in medical utilization.

Cummings NA, VandenBos GR. "The twenty year Kaiser Permanente experience with psychotherapy and medical utilization: implications for National Health Policy and National Health Insurance." *Health Policy Q* 1:159-75, 1981. (Class R)

The widespread and persistent evidence of reduced rate of increase of medical expense following mental health treatment argues for the inseparability of mind and body in health care, and it also argues specifically for the likelihood that mental health treatment may improve patients' ability to stay healthy enough to avoid hospital admission for physical illness.

Many older people have special mental health needs following emotionally distressing events such as suffering physical disease; experiencing loss of friends, spouse, social status, or income; being victims of crime; or being forced to relocate... In view of the needs of the older population, planned psychological intervention may have special advantages.

Mumford E, Schlesigner HJ, Glass GV, et al. "A new look at evidence about redcuced cost of medical utilization following mental health treatment." *Am J Psychiatry* 141:1145-58, 1984. (Class M)

This study adds weight to the conclusion drawn from the reviews of the scientific literature that the inclusion of outpatient psychotherapy in medical care systems can improve the quality and appropriateness of care and also lower the costs of providing it. During the four years of the study, the mental health treatment group had medical charges averaging $125 less than those of the comparison group.

Schlesinger HJ, Mumford E, Glass GV, et al. "Mental health treatment and medical care utilization in a fee-for-service system: outpatient mental health treatment following the onset of a chronic disease." *Am J Public Health* 73:422-29, 1983. (Class C)

8. Advance Directives

Burden of Suffering

- Issue pertinent to 100% of all audiences.
- Increased psychological trauma to patient/family/providers if not addressed prospectively.
- Misallocation of resources if therapies misapplied. ("The 6% of Medicare enrollees who die in any given year account for nearly 30% of overall expenditures.")
- One study showed that 89-93% of people desired Advance Directive statements.

Barriers

- Lack of physician/health care system initiative
- Misinformed public and providers regarding futility of treatment in certain situations (e.g., recovery rates of cardiopulmonary arrest of patients greater than 65 years of age).
- Difficult for many individuals and families to address death issues.
- Lack of easy access to background information and Advance Directive forms, Durable Power of Attorney for Health Care declarations, etc.)
- Procrastination.

Efficacy of Counseling

USPSTF does not address advance directives counseling. Studies have demonstrated that counseling markedly increases the completion rates for Living Wills and Durable Power of Attorney for Health Care.

Minnesota Department of Health. "Federal Law Regarding Advance Directives." Information Bulletin 98-4. St.Paul: Minnesota Department of Health, 1998. (Class not assignable)

Heefner JE, Fahy B, Hilling L, et al. "Outcomes of advance directive education of pulmonary rehabilitation patients." *Am J Resp Crit Care Med* 155:1055-59, 1997. (Class C)

Rubin SM, Strull WM, Fialkow MF, et al. "Increasing the completion of durable power of attorney for health care: a randomized, controlled trial." *JAMA* 271:209-12, 1994. (Class A)

10. Skin Cancer

Burden of Suffering

Skin cancer is the most common type of cancer in the U.S. Over 500,000 new cases of skin cancer are diagnosed each year. Cure rates are in the 90 percentile range for those with early diagnosis, but only 60% for those with late diagnosis.

Efficacy of Counseling

Many authorities advocate primary prevention of skin cancer by limiting exposure to sunlight and by applying sunscreen preparations rated 15 SPF or more. Few studies have examined the effectiveness of counseling patients to protect themselves from sunlight in reducing the incidence of skin cancer. There is evidence that sunscreen agents can block carcinogenic ultraviolet rays and can reduce the incidence of skin tumors in laboratory animals. There is also some evidence that public education can increase knowledge about the health risks of overexposure to the sun. At the same time, there is little evidence that patients act on this information, perhaps due to the perceived personal benefits of a suntan, or perception of low susceptibility to skin cancer.

Autier P, Dore JF, Schifflers E, et al. "Melanoma and use of sunscreens: an eortc case-control study in Germany, Belgium and France." *Int J Cancer* 61:749-55, 1995. (Class C)

Berwick M, Fine J, Bolognia JL. "Sun exposure and sunscreen use following a community skin cancer screening." *Prev Med* 21:302-10, 1992. (Class D)

Dietrich AJ, Olson AL, Sox CH, et al. "A community-based randomized trial encouraging sun protection for children." *Pediatr* 102:E64, 1998. (Class A)

Robinson JK. "Compensation strategies in sun protection behaviors by a population with nonmelonoma skin cancer." *Prev Med* 21:754-65, 1992. (Class D)

U.S. Preventive Services Task Force. "Screening for skin cancer: including counseling to prevent skin cancer." In Guide to clinical preventive services: an assessment of the effectiveness of 169 interventions. DiGuiseppi C, Kamerow DB, eds. Baltimore: Williams & Wilkins, 1996: 141-52. (Class R)

11. Viral Upper Respiratory Infection

We recognize that there are only so many counseling messages that can be addressed at any well child visit, and thus are requesting that these messages be conveyed at one well child visit in the first year of life, preferably just before or sometime during the cold and flu season (November through April).

Roberts CR, Imrey PB, Turner JD, et al. "Reducing physician visits for colds through consumer education." *JAMA* 250:1986-89, 1983. (Class A)

Vickery DM, Kalmer H, Lowry D, et al. "Effect of a self care education program on medical visits." *JAMA* 250:2952–2956, 1983. (Class A)

12. Infant Sleep Position and SIDS

American Academy of Pediatrics. "Positioning and SIDS." *Pediatr* 89:1120-26, 1992. (Class R)

14. Preconception Counseling

The work group feels that comprehensive preconception counseling is important for women who are seeking to become pregnant. Due to time constraints during a routine health maintenance visit, however, it may be more practical to provide comprehensive preconception counseling during a separate preconception counseling visit. See the ICSI Preterm Birth Prevention and Routine Prenatal Care guidelines for more information.

15. Prevention of Dental and Periodontal Disease

Burden of Suffering

A large proportion of the population of the United States suffers from tooth decay and gum and bone disease. The average schoolchild has at least one cavity in permanent teeth by age 9, 3 cavities by age 12, and 8 cavities by age 17. About one quarter have 5 or more decayed, missing, or filled permanent teeth. About half of all adults have gingivitis, and 80% have experienced some degree of periodontitis.

Efficacy of Counseling

The effectiveness of clinician counseling has not been adequately evaluated. Counseling patients on the individual messages is recommended based on the proven efficacy of risk reduction as a result of doing so.

Fluoride Supplementation

The water supply must be tested before any fluoride supplementation is prescribed by a physician or dentist.

The fluoride supplementation should include dosing for 0.3-0.6 PPM and > 0.6 water fluoride concentration:

	Concentration of fluoride in drinking water (ppm)		
Age	**< 0.3**	**0.3 – 0.6**	**> 0.6**
Birth – 6 mo	0	0	0
6 mo – 3 yrs	0.25 mg	0	0
3-6 yrs	0.5 mg	0.25 mg	0
6-16 yrs	1 mg	0.5 mg	0

If a child has access to a fluoridated water supply (i.e., school or daycare) and a non-fluoridated water supply (i.e., well water at home), the dosing for fluoride, supplements should be done on a weighted average of the two water supplies.

Example:

50% day care	+	50% well water
1.0 x .5 = 0.5 water supply		0.1 PPM water supply
(1.0 x .5 = 0.5)	+	(0.1 x .5 = .55 PPM)

*Dosing at .55 PPM water supply

If only bottled water is used, then it is recommended that they stick to one brand and have one brand analyzed, since bottled water can vary from 0-8 PPM. Dosing of fluoride supplements should be done according to what fluoride level is found (after analysis is done).

Filtration systems can reduce fluoride in the water supply. There is a need to educate parents about this issue. Since each filtration system varies, it is recommended to have the water tested two to three days after a new filter is placed. It is highly recommended to strictly following the manufacturer's instructions when changing the filters.

U.S. Preventive Services Task Force. "Counseling to prevent dental and periodontal disease." In Guide to clinical preventive services: an assessment of the effectiveness of 169 interventions. DiGuiseppi C, Kamerow DB, eds. Baltimore: Williams & Wilkins, 1996: 711-13. (Class R)

When measuring for improvement, it is critical that the measurements used are responsive to individual medical groups, and support medical groups' own clinical improvements. The following section of Specifications for Selected Measures is included in the guideline document to serve as an aid to the medical groups' own implementation efforts. It is likely that medical groups may need to adapt these measures to specific clinical practice or administrative systems.

Overview of Ideas for Measurement

The following aims were identified by the guideline work group as key areas in which medical groups may receive benefits in implementing this guideline.

The measures associated with these aims are presented as suggested measures. Measures of aim help medical groups determine progress in achieving a particular aim. However, additional approaches may be customized by individual medical groups to ferret out improvement information important to the medical group's individual practice.

Priority Aims for Medical Groups When Using This Guideline

1. Improve the targeting of preventive counseling through the use of a risk assessment tool.

   Possible measure of accomplishing this aim:

   a. Percentage of patients with documented risk assessment results within the last five years.

2. Increase counseling and education about good health and disease and injury prevention.

   Possible measures of accomplishing this aim:

   a. Percentage of patients with documentation in their medical records of counseling information within five topic areas given within the last five years. Recommended topic areas include tobacco cessation, physical activity and nutrition.

   b. Percentage of patients with lipid level screening who received nutritional counseling and an assessment of physical activity at the same visit.

   c. Percentage of patients who smoke who receive a counseling message at the last clinic visit.

Possible Success Measure # 2a

The percentage of patients with documentation in their medical records of counseling information within five topic areas given within the last five years.

Population Definition

All patients of any age.

Statistic to Be Reported

$$\frac{\text{The number of records having counseling documentation}}{\text{the total number of records reviewed}}$$

Numerator/Denominator Definitions

Numerator: Documentation is defined as the presence of documentation of any type in the record signifying that counseling on one or more counseling topics was provided during any visit within the last 5 years: Recommended topic areas include tobacco cessation, physical activity and nutrition. Other topic choices include, substance use/abuse, injury prevention, violence and abuse, sexual practices, mental health awareness, advance directives, skin cancer, viral upper respiratory infection, post menopausal hormone prophylaxis, preventive care visits, and dental and/or periodontal treatment.

Denominator: Patients having any clinic visit during the target month

Method/Source of Data Collection

A minimum random sample of 25 medical records for patients having any clinic visit during the target month will be reviewed. This review may be combined with the data collection activity for other measures related to preventive services. Documentation of any type related to counseling on five or more topics will be counted as a "yes."

Time Frame Pertaining to Data Collection

Data will be collected monthly.

Notes

This measure will inform the medical group of how well it is succeeding in accomplishing the provision and documentation of counseling activities.

PROBING MEASURE

1. A medical group may choose to do a breakdown of which counseling topics are or are not addressed and documented in their practice. Identifying topics not regularly addressed will provide an opportunity for improvement in that area.