HOME & HEALTH CONSUMER REPORTS

1. A GUIDE TO INDOOR AIR QUALITY

AIR POLLUTION SOURCES IN THE HOME

1. Moisture
2. Pressed Wood Furniture
3. Humidifier
4. Moth Repellents
5. Dry-Cleaned Goods
6. House Dust Mites
7. Personal Care Products
8. Air Freshener
9. Stored Fuels
10. Car Exhaust
11. Paint Supplies
12. Paneling
13. Wood Stove
14. Tobacco Smoke
15. Carpets
16. Pressed Wood Sub flooring
17. Drapes
18. Fireplace
19. Household Chemicals
20. Asbestos Floor Tiles
21. Pressed Wood Cabinets
22. Unvented Gas Stove
23. Asbestos Pipe Wrap
24. Radon
25. Unvented Clothes Dryer
26. Pesticides
27. Stored Hobby Products
28. Lead-Based Paint

INDOOR AIR QUALITY CONCERNS

All of us face a variety of risks to our health as we go about our day to day lives. Driving in cars, flying in planes, engaging in recreational activities, and being exposed to environmental pollutants all pose varying degrees of risk. Some risks are simply unavoidable. Some we choose to accept because to do otherwise would restrict our ability to lead our lives the way we want. And some are risks we might decide to avoid if we had the opportunity to make informed choices. Indoor air pollution is one risk that you can do something about.

In the last several years, a growing body of scientific evidence has indicated that the air within homes and other buildings can be more seriously polluted than the outdoor air in even the largest and most industrialized cities. Other research indicates that people spend approximately 90 percent of their time indoors. Thus, for many people, the risks to health may be greater due to exposure to air pollution indoors than outdoors.

In addition, people who may be exposed to indoor air pollutants for the longest periods of time are often those most susceptible to the effects of indoor air pollution. Such groups include the young, the elderly, and the chronically ill, especially those suffering from respiratory or cardiovascular disease.

WHY A BOOKLET ON INDOOR AIR?

While pollutant levels from individual sources may not pose a significant health risk by themselves, most homes have more than one source that contributes to indoor ar pollution. There can be a serious risk from the cumulative effects of these sources. Fortunately, there are steps that most people can take both to reduce the risk from existing sources and to prevent new problems from occurring. This booklet was prepared by the U.S. Environmental Protection Agency (EPA) and the U.S. Consumer Product Safety Commission (CPSC) to help you decide whether to take actions that can reduce the level of indoor air pollution in your own home.

Because so many Americans spend a lot of time in offices with mechanical heating, cooling, and ventilation systems, there is also a short section on the causes of poor air quality in offices and what you can do if you suspect that your office may have a problem. A glossary and a list of organizations where you can get additional information are listed at the back of this booklet.

WHAT CAUSES INDOOR AIR PROBLEMS?

Indoor pollution sources that release gases or particles into the air are the primary cause of indoor air quality problems in homes. Inadequate ventilation can increase indoor pollutant levels by not bringing in enough outdoor air to dilute emissions from indoor sources and by not carrying indoor air pollutants out of the home. High temperature and humidity levels can also increase concentrations of some pollutants.

Pollutant Sources

There are many sources of indoor air pollution in any home. These include combustion sources such as oil, gas, kerosene, coal, wood, and tobacco products; building materials and furnishings as diverse as deteriorated, asbestos containing insulation, wet or damp carpet, and cabinetry or furniture made of certain pressed wood products; products for household cleaning and maintenance, personal care, or hobbies; central heating and cooling systems and humidification devices; and outdoor sources such as radon, pesticides, and outdoor air pollution.

The relative importance of any single source depends on how much of a given pollutant it emits and how hazardous those emissions are. In some cases, factors such as how old the source is and whether it is properly maintained are significant. For example, an improperly adjusted gas stove can emit significantly more carbon monoxide than one that is properly adjusted.

Some sources, such as building materials, furnishings, and household products like air fresheners, release pollutants more or less continuously. Other sources, related to activities carried out in the home, release pollutants intermittently. These include smoking, the use of unvented or malfunctioning stoves, furnaces, or space heaters, the use of solvents in cleaning and hobby activities, the use of paint strippers in redecorating activities, and the use of cleaning products and pesticides in housekeeping. High pollutant concentrations can remain in the air for long periods after some of these activities.

Amount of Ventilation

If too little outdoor air enters a home, pollutants can accumulate o levels that can pose health and comfort problems. Unless they are built with special mechanical means of ventilation, homes that are designed and constructed to minimize the amount of outdoor air that can leak into and out of the home may have higher pollutant levels than other homes. However, because some weather conditions can drastically reduce the amount of outdoor air that enters a home, pollutants can build up even in homes that are normally considered leaky.

HOW DOES OUTDOOR AIR ENTER A HOUSE?

Outdoor air enters and leaves a house by: infiltration, natural ventilation, and mechanical ventilation. In a process known as infiltration, outdoor air flows into the house through openings, joints, and cracks in walls, floors, and ceilings, and around windows and doors. In natural ventilation, air moves through opened windows and doors. Air movement associated with infiltration and natural ventilation is caused by air temperature differences between indoors and outdoors and by wind. Finally, there are a number of mechanical ventilation devices, from outdoor vented fans that intermittently remove air from a single room, such as bathrooms and kitchen, to air handling systems that use fans and duct work to continuously remove indoor air and distribute filtered and conditioned outdoor air to strategic points throughout the house. The rate at which outdoor air replaces indoor air is described as the air exchange rate. When there is little infiltration, natural ventilation, or mechanical ventilation, the air exchange rate is low and pollutant levels can increase.

WHAT IF YOU LIVE IN AN APARTMENT?

Apartments can have the same indoor air problems as single family homes because many of the pollution sources, such as the interior building materials, furnishings, and household products, are similar. Indoor air problems similar to those in offices are caused by such sources as contaminated ventilation systems, improperly placed outdoor air intakes, or maintenance activities.

Solutions to air quality problems in apartments, as in homes and offices, involve such actions as: eliminating or controlling the sources of pollution, increasing ventilation, and installing air cleaning devices. Often a resident can take the appropriate action to improve the indoor air quality by removing a source, altering an activity, unblocking an air supply vent, or opening a window to temporarily increase the ventilation; in other cases, however, only the building owner or manager is in a position to remedy the problem. (See the section What to Do If You Suspect a Problem on page 30.) You can encourage building management to follow guidance in EPA and NIOSH s Building Air Quality: A Guide for Building Owners and Facility Managers. It is available for $24 from the Superintendent of Documents, P.O. Box 371954, Pittsburgh, PA 152507954; stock # 055000003904.

INDOOR AIR AND YOUR HEALTH

Health effects from indoor air pollutants may be experienced soon after exposure or, possibly, years later.

Immediate effects may show up after a single exposure or repeated exposures. These include irritation of the eyes, nose, and throat, headaches, dizziness, and fatigue. Such immediate effects are usually short term and treatable. Sometimes the treatment is simply eliminating the person s exposure to the source of the pollution, if it can be identified. Symptoms of some diseases, including asthma, hypersensitivity pneumonitis, and humidifier fever, may also show up soon after exposure to some indoor air pollutants.

The likelihood of immediate reactions to indoor air pollutants depends on several factors. Age and preexisting medical conditions are two important influences. In other cases, whether a person reacts to a pollutant depends on individual sensitivity, which varies tremendously from person to person. Some people can become sensitized to biological pollutants after repeated exposures, and it appears that some people can become sensitized to chemical pollutants as well.

Certain immediate effects are similar to those from colds or other viral diseases, so it is often difficult to determine if the symptoms are a result of exposure to indoor air pollution. For this reason, it is important to pay attention to the time and place the symptoms occur. If the symptoms fade or go away when a person is away from the home and return when the person returns, an effort should be made to identify indoor air sources that may be possible causes. Some effects may be made worse by an inadequate supply of outdoor air or from the heating, cooling, or

humidity conditions prevalent in the home.

Other health effects may show up either years after exposure has occurred or only after long or repeated periods of exposure. These effects, which include some respiratory diseases, heart disease, and cancer, can be severely debilitating or fatal. It is prudent to try to improve the indoor air quality in your home even if symptoms are not noticeable. More information on potential health effects from particular indoor air pollutants is provided in the section, A Look at Source Specific Controls.

While pollutants commonly found in indoor air are responsible for many harmful effects, there is considerable uncertainty about what concentrations or periods of exposure are necessary to produce specific health problems. People also react very differently to exposure to indoor air pollutants. Further research is needed to better understand which health effects occur after exposure to the average pollutant concentrations found in homes and which occur from the higher concentrations that occur for short periods of time.

The health effects associated with some indoor air pollutants are summarized in the chart in the middle of this booklet titled Reference Guide to Major Indoor Air Pollutants in the Home.

IDENTIFYING AIR QUALITY PROBLEMS

Some health effects can be useful indicators of an indoor air quality problem, especially if they appear after a person moves to a new residence, remodels or refurnishes a home, or treats a home with pesticides. If you think that you have symptoms that may be related to your home environment, discuss the with your doctor or your local health department to see if they could be caused by indoor air pollution. You may also want to consult a board certified allergist or an occupational medicine specialist for answers to your questions.

Another way to judge whether your home has or could develop indoor air problems is to identify potential sources of indoor air pollution. Although the presence of such sources (see illustration at the beginning of this booklet) does not necessarily mean that you have an indoor air quality problem, being aware of the type and number of potential sources is an important step toward assessing the air quality in your home.

A third way to decide whether your home may have poor indoor air quality is to look at your lifestyle and activities. Human activities can be significant sources of indoor air pollution. Finally, look for signs of problems with the ventilation in your home. Signs that can indicate your home may not have enough ventilation include moisture condensation on windows or walls, smelly or stuffy air, dirty central heating and air cooling equipment, and areas where books, shoes, or other items become moldy. To detect odors in your home, step outside for a few minutes, and then upon reentering your home, note whether odors are noticeable.

MEASURING POLLUTANT LEVELS

The federal government recommends that you measure the level of radon in your home. Without measurements there is no way to tell whether radon is present because it is a colorless, odorless, radioactive gas. Inexpensive devices are available for measuring radon. EPA provides guidance as to risks associated with different levels of exposure and when the public should consider corrective action. There are specific mitigation techniques that have proven effective in reducing levels of radon in the home. (See Radon section on p. 11 of this booklet for additional information about testing and controlling radon in homes.)

For pollutants other than radon, measurements are most appropriate when there are either health symptoms or signs of poor ventilation and specific sources or pollutants have been identified as possible causes of indoor air quality problems. Testing for many pollutants can be expensive. Before monitoring your home for pollutants besides radon, consult your state or local health department or professionals who have experience in solving indoor air quality problems in nonindustrial buildings.

WEATHERIZING YOUR HOME

The federal government recommends that homes be weatherized in order to reduce the amount of energy needed for heating and cooling. While weatherization is underway, however, steps should also be taken to minimize pollution from sources inside the home. (See Improving the Air Quality in Your Home for recommended actions.) In addition, residents should be alert to the emergence of signs of inadequate ventilation, such as stuffy air, moisture condensation on cold surfaces, or mold and mildew growth. Additional weatherization measures should not be undertaken until these problems have been corrected.

Weatherization generally does not cause indoor air problems by adding new pollutants to the air. (There are a few exceptions, such as caulking, that can sometimes emit pollutants.) However, measures such as installing storm windows, weather stripping, caulking, and blown in wall insulation can reduce the amount of outdoor air infiltrating into a home. Consequently, after weatherization, concentrations of indoor air pollutants from sources inside the home can increase.

THREE BASIC STRATEGIES

Source Control

Usually the most effective way to improve indoor air quality is to eliminate individual sources of pollution or to reduce their emissions. Some sources, like those that contain asbestos, can be sealed or enclosed; others, like gas stoves, can be adjusted to decrease the amount of emissions. In many cases, source control is also a more cost efficient approach to protecting indoor air quality than increasing ventilation because increasing ventilation can increase energy costs. Specific sources of indoor air pollution in your home are listed later in this section.

Ventilation Improvements

Another approach to lowering the concentrations of indoor air pollutants in your home is to increase the amount of outdoor air coming indoors. Most home heating and cooling systems, including forced air heating systems, do not mechanically bring fresh air into the house. Opening windows and doors, operating window or attic fans, when the weather permits, or running a window air conditioner with the vent control open increases the outdoor ventilation rate. Local bathroom or kitchen fans that exhaust outdoors remove contaminants directly from the room where the fan is located and also increase the outdoor air ventilation rate.

It is particularly important to take as many of these steps as possible while you are involved in short-term activities that can generate high levels of pollutants for example, painting, paint stripping, heating with kerosene heaters, cooking, or engaging in maintenance and hobby activities such as welding, soldering, or sanding. You might also choose to do some of these activities outdoors, if you can and if weather permits.

Advanced designs of new homes are starting to feature mechanical systems that bring outdoor air into the home. Some of these designs include energy efficient heat recovery ventilators (also known as air-to-air heat exchangers). For more information about air-to-air heat exchangers, contact the Conservation and Renewable Energy Inquiry and Referral Service (CAREIRS), PO Box 3048, Merrifield, VA 22116; (800) 5232929.

Air Cleaners

There are many types and sizes of air cleaners on the market, ranging from relatively inexpensive tabletop models to sophisticated and expensive whole house systems. Some air cleaners are highly effective at particle removal, while others, including most tabletop models, are much less so. Air cleaners are generally not designed to remove gaseous pollutants.

The effectiveness of an air cleaner depends on how well it collects pollutants from indoor air (expressed as a percentage efficiency rate) and how much air it draws through the cleaning or filtering element (expressed in cubic feet per minute). A very efficient collector with a low air circulation rate will not be effective, nor will a cleaner with a high air circulation rate but a less efficient collector. The long term performance of any air cleaner depends on maintaining it according to the manufacturer s directions.

Another important factor in determining the effectiveness of an air cleaner is the strength of the pollutant source. Tabletop air cleaners, in particular, may not remove satisfactory amounts of pollutants from strong nearby sources. People with a sensitivity to particular sources may find that air cleaners are helpful only in conjunction with concerted efforts to remove the

source.

Over the past few years, there has been some publicity suggesting that house plants have been shown to reduce levels of some chemicals in laboratory experiments. There is currently no evidence, however, that a reasonable number of houseplants remove significant quantities of pollutants in homes and offices. Indoor houseplants should not be over watered because overly damp soil may promote the growth of microorganisms which can affect allergic individuals.

At present, EPA does not recommend using air cleaners to reduce levels of radon and its decay products. The effectiveness of these devices is uncertain because they only partially remove the radon decay products and do not diminish the amount of radon entering the home. EPA plans to do additional research on whether air cleaners are, or could become, a reliable means of reducing the health risk from radon. EPA s booklet, Residential Air Cleaning Devices, provides further information on air cleaning devices to reduce indoor air pollutants

For most indoor air quality problems in the home, source control is the most effective solution. This section takes a source by source look at the most common indoor air pollutants, their potential health effects, and ways to reduce levels in the home. (For a summary of the points made in this section, see the chart in the middle of this booklet titled Reference Guide to Major Indoor Air Pollutants in the Home.)

RADON

The most common source of indoor radon is uranium in the soil or rock on which homes are built. As uranium naturally breaks down, it releases radon gas which is a colorless, odorless, radioactive gas. Radon gas enters homes through dirt floors, cracks in concrete walls and floors, floor drains, and sumps. When radon become strapped in buildings and concentrations build up indoors, exposure to radon becomes a concern.

Any home may have a radon problem. This means new and old homes, well sealed and drafty homes, and homes with or without basements.

Sometimes radon enters the home through well water. In a small number of homes, the building materials can give off radon, too. However, building materials rarely cause radon problems by themselves.

Health Effects of Radon

The predominant health effect associated with exposure to elevated levels of radon is lung cancer. Research suggests that swallowing water with high radon levels may pose risks, too, although these are believed to be much lower than those from breathing air containing radon. Major health organizations (like

the Centers for Disease Control and Prevention, the American Lung Association (ALA), and the American Medical Association) agree with estimates that radon causes thousands of preventable lung cancer deaths each year. EPA estimates that radon causes about 14,000 deaths per year in the United States however, this number could range from 7,000 to 30,000 deaths per year. If you smoke and your home has high radon levels, your risk of lung cancer is especially high.

Reducing Exposure to Radon in Homes

Measure levels of radon in your home.

You can t see radon, but it s not hard to find out if you have a radon problem in your home. Testing is easy and should only take a little of your time.

There are many kinds of inexpensive, do-it-yourself radon test kits you can get through the mail and in hardware stores and other retail outlets. Make sure you buy a test kit that has passed EPA s testing program or is state certified. These kits will usually display the phrase Meets EPA Requirements. If you prefer, or if you are buying or selling a home, you can hire a trained contractor to do the testing for you. The EPA Radon Measurement Proficiency (RMP) Program evaluates testing contractors. A contractor who has met EPA s requirements will carry a special RMP identification card. EPA provides a list of companies and individual contractors to state radon offices. You can call your state radon office to obtain a list of qualified contractors in your area (call 800-SOS-RADON for a list of state radon offices).

Refer to the EPA guidelines on how to test and interpret your test results.

You can learn more about radon through EPA s publications, A Citizen s Guide to Radon: The Guide to Protecting Yourself and Your Family From Radon and Home Buyer s and Seller s Guide to Radon, which are available from state radon offices.

Learn about radon reduction methods.

Ways to reduce radon in your home are discussed in EPA s Consumer s Guide to Radon Reduction. You can get a copy from your state radon office. There are simple solutions to radon problems in homes. Thousands of homeowners have already fixed radon problems. Lowering high radon levels requires technical knowledge and special skills. You should use a contractor who is trained to fix radon problems.

The EPA Radon Contractor Proficiency (RCP) Program tests these contractors. EPA provides a list of RCP contractors to state radon offices. A contractor who is listed by EPA will carry a special RCP identification card. A trained RCP contractor can study the problem in your home and help you pick the correct treatment method. Check with your state radon office for names of qualified or state certified radon reduction

contractors in your area.

Stop smoking and discourage smoking in your home.

Scientific evidence indicates that smoking combined with radon is an especially serious health risk. Stop smoking and lower your radon level to reduce lung cancer risk.

Treat radon contaminated well water.

While radon in water is not a problem in homes served by most public water supplies, it has been found in well water. If you've tested the air in your home and found a radon problem, and you have a well, contact a lab certified to measure radiation in water to have your water tested. Radon problems in water can be readily fixed. Call your state radon office or the EPA Drinking Water Hotline (8004264791) for more information.

ENVIRONMENTAL TOBACCO SMOKE

Environmental tobacco smoke (ETS) is the mixture of smoke that comes from the burning end of a cigarette, pipe, or cigar, and smoke exhaled by the smoker. It is a complex mixture of over 4,000 compounds, more than 40 of which are known to cause cancer in humans or animals and many of which are strong irritants. ETS is often referred to as secondhand smoke and exposure to ETS is often called passive smoking.

Health Effects of Environmental Tobacco Smoke

In 1992, EPA completed a major assessment of the respiratory health risks of ETS (Respiratory Health Effects of Passive Smoking: Lung Cancer and Other Disorders EPA/600/690/006F). The report concludes that exposure to ETS is responsible for approximately 3,000 lung cancer deaths each year in non-smoking adults and impairs the respiratory health of hundreds of thousands of children.

Infants and young children whose parents smoke in their presence are at increased risk of lower respiratory tract infections (pneumonia and bronchitis) and are more likely to have symptoms of respiratory irritation like cough, excess phlegm, and wheeze. EPA estimates that passive smoking annually causes between 150,000 and 300,000 lower respiratory tract infections in infants and children under 18 months of age, resulting in between 7,500 and 15,000 hospitalizations each year. These children may also have a buildup of fluid in the middle ear, which can lead to ear infections. Older children who have been exposed to secondhand smoke may have slightly reduced lung function.

Asthmatic children are especially at risk. EPA estimates that exposure to secondhand smoke increases the number of episodes and severity of symptoms in hundreds of thousands of asthmatic children, and may cause thousands of non-asthmatic children to develop the disease each year. EPA estimates that between 200,000 and 1,000,000 asthmatic children have their condition made worse by exposure to secondhand smoke each year.

Exposure to secondhand smoke causes eye, nose, and throat irritation. It may affect the cardiovascular system and some studies have linked exposure to secondhand smoke with the onset of chest pain. For publications about ETS, contact EPA s Indoor Air Quality Information Clearinghouse (IAQ-INFO), 8004384318.

Reducing Exposure to Environmental Tobacco Smoke

Don t smoke at home or permit others to do so. Ask smokers to smoke outdoors.

The 1986 Surgeon General s report concluded that physical separation of smokers and nonsmokers in a common air space, such as different rooms within the same house, may reduce but will not eliminate nonsmokers exposure to environmental tobacco smoke.

If smoking indoors cannot be avoided, increase ventilation in the area where smoking takes place.

Open windows or use exhaust fans. Ventilation, a common method of reducing exposure to indoor air pollutants, also will reduce but not eliminate exposure to environmental tobacco smoke. Because smoking produces such large amounts of pollutants, natural or mechanical ventilation techniques do not remove them from the air in your home as quickly as they build up. In addition, the large increases in ventilation it takes to significantly reduce exposure to environmental tobacco smoke can also increase energy costs substantially. Consequently, the most effective way to reduce exposure to environmental tobacco smoke in the home is to eliminate smoking there.

Do not smoke if children are present, particularly infants and toddlers.

Children are particularly susceptible to the effects of passive smoking. Do not allow baby sitters or others who work in your home to smoke indoors. Discourage others from smoking around children. Find out about the smoking policies of the day care center providers, schools, and other care givers for your children. The policy should protect children from exposure to ETS.

BIOLOGICAL CONTAMINANTS

Biological contaminants include bacteria, molds, mildew, viruses, animal dander and cat saliva, house dust mites, cockroaches, and pollen. There are many sources of these pollutants. Pollens originate from plants; viruses are transmitted by people and animals; bacteria are carried by people, animals, and soil and plant debris; and household pets are sources of saliva and animal dander. The protein in urine from rats and mice is a potent allergen. When it dries, it can become airborne. Contaminated central air handling systems can become breeding grounds for mold, mildew, and other sources of biological contaminants and can then distribute these contaminants through the home.

By controlling the relative humidity level in a home, the growth of some sources of biologicals can be minimized. A relative humidity of 3050 percent is generally recommended for homes. Standing water, water-damaged materials, or wet surfaces also serve as a breeding ground for molds, mildews, bacteria, and insects. House dust mites, the source of one of the most powerful biological allergens, grow in damp, warm environments.

Health Effects From Biological Contaminants

Some biological contaminants trigger allergic reactions, including hypersensitivity pneumonitis, allergic rhinitis, and some types of asthma. Infectious illnesses, such as influenza, measles, and chicken pox are transmitted through the air. Molds and mildews release disease causing toxins. Symptoms of health problems caused by biological pollutants include sneezing, watery eyes, coughing, shortness of breath, dizziness, lethargy, fever, and digestive problems.

Allergic reactions occur only after repeated exposure to a specific biological allergen. However, that reaction may occur immediately upon re-exposure or after multiple exposures over time. As a result, people who have noticed only mild allergic reactions, or no reactions at all, may suddenly find themselves very sensitive to particular allergens.

Some diseases, like humidifier fever, are associated with exposure to toxins from microorganisms that can grow in large building ventilation systems. However, these diseases can also be traced to microorganisms that grow in home heating and cooling systems and humidifiers. Children, elderly people, and people with breathing problems, allergies, and lung diseases are particularly susceptible to disease causing biological agents in the indoor air.

Reducing Exposure to Biological Contaminants

Install and use exhaust fans that are vented to the outdoors in kitchens and bathrooms and vent clothes dryers outdoors.

These actions can eliminate much of the moisture that builds up from everyday activities. There are exhaust fans on the market that produce little noise, an important consideration for some people. Another benefit to using kitchen and bathroom exhaust fans is that they can reduce levels of organic pollutants that vaporize from hot water used in showers and dishwashers.

Ventilate the attic and crawl spaces to prevent moisture buildup.

Keeping humidity levels in these areas below 50 percent can prevent water condensation on building materials.

If using cool mist or ultrasonic humidifiers, clean appliances according to manufacturer s instructions and refill with fresh water daily.

Because these humidifiers can become breeding grounds for biological contaminants, they have the potential for causing diseases such as hypersensitivity pneumonitis and humidifier fever. Evaporation trays in air conditioners, dehumidifiers, and refrigerators should also be cleaned frequently.

Thoroughly clean and dry water-damaged carpets and building materials (within 24 hours if possible) or consider removal and replacement.

Water-damaged carpets and building materials can harbor mold and bacteria. It is very difficult to completely rid such materials of biological contaminants.

Keep the house clean. House dust mites, pollens, animal dander, and other allergy causing agents can be reduced, although not eliminated, through regular cleaning.

People who are allergic to these pollutants should use allergen proof mattress encasements, wash bedding in hot (130 F) water, and avoid room furnishings that accumulate dust, especially if they cannot be washed in hot water. Allergic individuals should also leave the house while it is being vacuumed because vacuuming can actually increase airborne levels of mite allergens and other biological contaminants. Using central vacuum systems that are vented to the outdoors or vacuums with high efficiency filters may also be of help.

Take steps to minimize biological pollutants in basements.

Clean and disinfect the basement floor drain regularly. Do not finish a basement below ground level unless all water leaks are patched and outdoor ventilation and adequate heat to prevent condensation are provided. Operate a dehumidifier in the basement if needed to keep relative humidity levels between 30 50 percent.

To learn more about biological pollutants, read Biological Pollutants in Your Home issued by the U.S. Consumer Product Safety Commission and the American Lung Association. For contact information, see the section, Where to Go For Additional Information.

STOVES, HEATERS, FIREPLACES, AND CHIMNEYS

In addition to environmental tobacco smoke, other sources of combustion products are unvented kerosene and gas space heaters, wood stoves, fireplaces, and gas stoves. The major pollutants released are carbon monoxide, nitrogen dioxide, and particles. Unvented kerosene heaters may also generate acid aerosols.

Combustion gases and particles also come from chimneys and flues that are improperly installed or maintained and cracked furnace heat exchangers. Pollutants from fireplaces and wood stoves with no dedicated outdoor air supply can be back drafted from the chimney into the living space, particularly in weatherized homes.

Health Effects of Combustion Products

Carbon monoxide is a colorless, odorless gas that interferes with the delivery of oxygen throughout the body. At high concentrations it can cause unconsciousness and death. Lower concentrations can cause a range of symptoms from headaches, dizziness, weakness, nausea, confusion, and disorientation, to fatigue in healthy people and episodes of increased chest pain in people with chronic heart disease. The symptoms of carbon monoxide poisoning are sometimes confused with the flu or food poisoning. Fetuses, infants, elderly people, and people with anemia or with a history of heart or respiratory disease can be especially sensitive to carbon monoxide exposures.

Nitrogen dioxide is a colorless, odorless gas that irritates the mucous membranes in the eye, nose, and throat and causes shortness of breath after exposure to high concentrations. There is evidence that high concentrations or continued exposure to low levels of nitrogen dioxide increases the risk of respiratory infection; there is also evidence from animal studies that repeated exposures to elevated nitrogen dioxide levels may lead, or contribute, to the development of lung disease such as emphysema. People at particular risk from exposure to nitrogen dioxide include children and individuals with asthma and other respiratory diseases.

Particles, released when fuels are incompletely burned, can lodge in the lungs and irritate or damage lung tissue. A number of pollutants, including radon and benzo(a)pyrene, both of which can cause cancer, attach to small particles that are inhaled and then carried deep into the lung.

Reducing Exposure to Combustion Products in Homes

Take special precautions when operating fuel burning unvented space heaters.

Consider potential effects of indoor air pollution if you use an unvented kerosene or gas space heater. Follow the manufacturer s directions, especially instructions on the proper fuel and keeping the heater properly adjusted. A persistent yellow tipped flame is generally an indicator of maladjustment and increased pollutant emissions. While a space heater is in use, open a door from the room where the heater is located to the rest of the house and open a window slightly.

Install and use exhaust fans over gas cooking stoves and ranges and keep the burners properly adjusted.

Using a stove hood with a fan vented to the outdoors greatly reduces exposure to pollutants during cooking. Improper adjustment, often indicated by a persistent yellow tipped flame, causes increased pollutant emissions. Ask your gas company to adjust the burner so that the flame tip is blue. If you purchase a new gas stove or range, consider buying one with pilotless ignition because it does not have a pilot light that burns continuously. Never use a gas stove to heat your home. Always

make certain the flue in your gas fireplace is open when the fireplace is in use.

Keep wood stove emissions to a minimum. Choose properly sized new stoves that are certified as meeting EPA emission standards.

Make certain that doors in old wood stoves are tight fitting. Use aged or cured (dried) wood only and follow the manufacturer s directions for starting, stoking, and putting out the fire in wood stoves. Chemicals are used to pressure treat wood; such wood should never be burned indoors. (Because some old gaskets in wood stove doors contain asbestos, when replacing gaskets refer to the instructions in the CPSC, ALA, and EPA booklet, Asbestos in Your Home, to avoid creating an asbestos problem. New gaskets are made of fiberglass.)

Have central air handling systems, including furnaces, flues, and chimneys, inspected annually and promptly repair cracks or damaged parts.

Blocked, leaking, or damaged chimneys or flues release harmful combustion gases and particles and even fatal concentrations of carbon monoxide. Strictly follow all service and maintenance procedures recommended by the manufacturer, including those that tell you how frequently to change the filter. If manufacturer s instructions are not readily available, change filters once every month or two during periods of use. Proper maintenance is important even for new furnaces because they can also corrode and leak combustion gases, including carbon monoxide. Read the booklet What You Should Know About Combustion Appliances and Indoor Air Pollution to learn more about combustion pollutants. The booklet is available by contacting CPSC, EPA s IAQ INFO Clearinghouse, or your local ALA. (See Where to Go for Additional Information for contact information.)

HOUSEHOLD PRODUCTS

Organic chemicals are widely used as ingredients in household products. Paints, varnishes, and wax all contain organic solvents, as do many cleaning, disinfecting, cosmetic, decreasing, and hobby products. Fuels are made up of organic chemicals. All of these products can release organic compounds while you are using them, and, to some degree, when they are stored.

EPA s Total Exposure Assessment Methodology (TEAM) studies found levels of about a dozen common organic pollutants to be 2 to 5 times higher inside homes than outside, regardless of whether the homes were located in rural or highly industrial areas. Additional TEAM studies indicate that while people are using products containing organic chemicals, they can expose themselves and others to very high pollutant levels, and elevated concentrations can persist in the air long after the activity is completed.

Health Effects of Household Chemicals

The ability of organic chemicals to cause health effects varies greatly from those that are highly toxic, to those with no known health effect. As with other pollutants, the extent and nature of the health effect will depend on many factors including level of exposure and length of time exposed. Eye and respiratory tract irritation, headaches, dizziness, visual disorders, and memory impairment are among the immediate symptoms that some people have experienced soon after exposure to some organics. At present, not much is known about what health effects occur from the levels of organics usually found in homes. Many organic compounds are known to cause cancer in animals; some are suspected of causing, or are known to cause, cancer in humans.

Reducing Exposure to Household Chemicals

Follow label instructions carefully.

Potentially hazardous products often have warnings aimed at reducing exposure of the user. For example, if a label says to use the product in a well ventilated area, go outdoors or in areas equipped with an exhaust fan to use it. Otherwise, open up windows to provide the maximum amount of outdoor air possible.

Throw away partially full containers of old or unneeded chemicals safely.

Because gases can leak even from closed containers, this single step could help lower concentrations of organic chemicals in your home. (Be sure that materials you decide to keep are stored not only in a well ventilated area but are also safely out of reach of children.) Do not simply toss these unwanted products in the garbage can. Find out if your local government or any organization in your community sponsors special days for the collection of toxic household wastes. If such days are available, use them to dispose of the unwanted containers safely. If no such collection days are available, think about organizing one.

Buy limited quantities.

If you use products only occasionally or seasonally, such as paints, paint strippers, and kerosene for space heaters or gasoline for lawn mowers, buy only as much as you will use right away.

Keep exposure to emissions from products containing methylene chloride to a minimum.

Consumer products that contain methylene chloride include paint strippers, adhesive removers, and aerosol spray paints. Methylene chloride is known to cause cancer in animals. Also, methylene chloride is converted to carbon monoxide in the body and can cause symptoms associated with exposure to carbon monoxide. Carefully read the labels containing health hazard information and cautions on the proper use of these products. Use products that contain methylene chloride outdoors when possible; use indoors only if the area is well ventilated.

Keep exposure to benzene to a minimum.

Benzene is a known human carcinogen. The main indoor sources of this chemical are environmental tobacco smoke, stored fuels and paint supplies, and automobile emissions in attached garages. Actions that will reduce benzene exposure include eliminating smoking within the home, providing for maximum ventilation during painting, and discarding paint supplies and special fuels that will not be used immediately.

Keep exposure to perchloroethylene emissions from newly dry cleaned materials to a minimum.

Perchloroethylene is the chemical most widely used in dry cleaning. In laboratory studies, it has been shown to cause cancer in animals. Recent studies indicate that people breathe low levels of this chemical both in homes where dry cleaned goods are stored and as they wear dry cleaned clothing. Dry cleaners recapture the perchloroethylene during the dry cleaning process so they can save money by re using it, and they remove more of the chemical during the pressing and finishing processes. Some dry cleaners, however, do not remove as much perchloroethylene as possible all of the time. Taking steps to minimize your exposure to this chemical is prudent. If dry cleaned goods have a strong chemical odor when you pick them up, do not accept them until they have been properly dried. If goods with a chemical odor are returned to you on subsequent visits, try a different dry cleaner.

FORMALDEHYDE

Formaldehyde is an important chemical used widely by industry to manufacture building materials and numerous household products. It is also a byproduct of combustion and certain other natural processes. Thus, it may be present in substantial concentrations both indoors and outdoors.

Sources of formaldehyde in the home include building materials, smoking, household products, and the use of unvented, fuel burning appliances, like gas stoves or kerosene space heaters. Formaldehyde, by itself or in combination with other chemicals, serves a number of purposes in manufactured products. For example, it is used to add permanent press qualities to clothing and draperies, as a component of glues and adhesives, and as a preservative in some paints and coating products.

In homes, the most significant sources of formaldehyde are likely to be pressed wood products made using adhesives that contain ureaformaldehyde (UF) resins. Pressed wood products made for indoor use include: particle board (used as sub flooring and shelving and in cabinetry and furniture); hardwood plywood paneling (used for decorative wall covering and used in cabinets and furniture); and medium density fiberboard (used for drawer fronts, cabinets, and furniture tops). Medium density fiberboard contains a higher resin to wood ratio than any other UF pressed wood product and is generally recognized as being the highest formaldehyde emitting pressed wood product.

Other pressed wood products, such as softwood plywood and flake or oriented strand board, are produced for exterior construction use and contain the dark, or red/black colored phenolformaldehyde (PF) resin. Although formaldehyde is present in both types of resins, pressed woods that contain PF resin generally emit formaldehyde at considerably lower rates than those containing UF resin.

Since 1985, the Department of Housing and Urban Development (HUD) has permitted only the use of plywood and particle board that conform to specified formaldehyde emission limits in the construction of prefabricated and mobile homes. In the past, some of these homes had elevated levels of formaldehyde because of the large amount of high emitting pressed wood products used in their construction and because of their relatively small interior space.

The rate at which products like pressed wood or textiles release formaldehyde can change. Formaldehyde emissions will generally decrease as products age. When the products are new, high indoor temperatures or humidity can cause increased release of formaldehyde from these products.

During the 1970s, many homeowners had ureaformaldehyde foam

insulation (UFFI) installed in the wall cavities of their homes as an energy conservation measure. However, many of these homes were found to have relatively high indoor concentrations of formaldehyde soon after the UFFI installation. Few homes are now being insulated with this product. Studies

(continued on page 23)

show that formaldehyde emissions from UFFI decline with time; therefore, homes in which UFFI was installed many years ago are unlikely to have high levels of formaldehyde now.

Health Effects of Formaldehyde

Formaldehyde, a colorless, pungent smelling gas, can cause watery eyes, burning sensations in the eyes and throat, nausea, and difficulty in breathing in some humans exposed at elevated levels (above 0.1 parts per million). High concentrations may trigger attacks in people with asthma. There is evidence that some people can develop a sensitivity to formaldehyde. It has also been shown to cause cancer in animals and may cause cancer in humans.

Reducing Exposure to Formaldehyde in Homes

Ask about the formaldehyde content of pressed wood products, including building materials, cabinetry, and furniture before you purchase them.

If you experience adverse reactions to formaldehyde, you may want to avoid the use of pressed wood products and other formaldehyde emitting goods. Even if you do not experience such reactions, you

may wish to reduce your exposure as much as possible by purchasing exterior grade products, which emit less formaldehyde. For further information on formaldehyde and consumer products, call the EPA Toxic Substance Control Act (TSCA) assistance line (2025541404).

Some studies suggest that coating pressed wood products with polyurethane may reduce formaldehyde emissions for some period of time. To be effective, any such coating must cover all surfaces and edges and remain intact. Increase the ventilation and carefully follow the manufacturer s instructions while applying these coatings. (If you are sensitive to formaldehyde, check the label contents before purchasing coating products to avoid buying products that contain formaldehyde, as they will emit the chemical for a short time after application.)

Maintain moderate temperature and humidity levels and provide adequate ventilation.

The rate at which formaldehyde is released is accelerated by heat and may also depend somewhat on the humidity level. Therefore, the use of dehumidifiers and air conditioning to control humidity and to maintain a moderate temperature can help reduce formaldehyde emissions. (Drain and clean dehumidifier collection trays frequently so that they do not become a breeding ground for microorganisms.) Increasing the rate of ventilation in your home will also help in reducing formaldehyde levels.

PESTICIDES

According to a recent survey, 75 percent of U.S. households used at least one pesticide product indoors during the past year. Products used most often are insecticides and disinfectants. Another study suggests that 80 90 percent of most people s exposure to pesticides occurs indoors and that measurable levels of up to a dozen pesticides have been found in the air inside homes. The amount of pesticides found in homes appears to be greater than can be explained by recent pesticide use in those households; other possible sources include contaminated soil or dust that floats or is tracked in from outside, stored pesticide containers, and household surfaces that collect and then release the pesticides. Pesticides used in and around the home include products to control insects (insecticides), termites (termiticides), rodents (rodenticides), fungi (fungicides), and microbes (disinfectants). They are sold as sprays, liquids, sticks, powders, crystals, balls, and foggers.

In 1990, the American Association of Poison Control Centers reported that some 79,000 children were involved in common household pesticide poisonings or exposures. In households with children under five years old, almost one half stored at least one pesticide product within reach of children.

EPA registers pesticides for use and requires manufacturers to put information on the label about when and how to use the pesticide. It is important to remember that the "cide" in pesticides means to kill. These products can be dangerous if

not used properly.

In addition to the active ingredient, pesticides are also made up of ingredients that are used to carry the active agent. These carrier agents are called "inerts" in pesticides because they are not toxic to the targeted pest; nevertheless, some inerts are capable of causing health problems.

Health Effects From Pesticides

Both the active and inert ingredients in pesticides can be organic compounds; therefore, both could add to the levels of airborne organics inside homes. Both types of ingredients can case the effects discussed in this booklet under Household Products. However, as with other household products, there is insufficient understanding at present about what pesticide concentrations are necessary to produce these effects.

Exposure to high levels of cyclodiene pesticides, commonly associated with misapplication, has produced various symptoms, including headaches, dizziness, muscle twitching, weakness, tingling sensations, and nausea. In addition, EPA is concerned that cyclodienes might cause long term damage to the liver and the central nervous system, as well as an increased risk of cancer.

There is no further sale or commercial use permitted for the following cyclodiene or related pesticides: chlordane, aldrin, dieldrin, and heptachlor. The only exception is the use of heptachlor by utility companies to control fire ants in underground cable boxes.

Reducing Exposure to Pesticides in Homes

Read the label and follow the directions. It is illegal to use any pesticide in any manner inconsistent with the directions on its label.

Unless you have had special training and are certified, never use a pesticide that is restricted to use by state certified pest control operators. Such pesticides are simply too dangerous for application by a non certified person. Use only the pesticides approved for use by the general public and then only in recommended amounts; increasing the amount does not offer more protection against pests and can be harmful to you and your plants and pets.

Ventilate the area well after pesticide use.

Mix or dilute pesticides outdoors or in a well ventilated area and only in the amounts that will be immediately needed. If possible, take plants and pets outside when applying pesticides to them.

Use nonchemical methods of pest control when possible.

Since pesticides can be found far from the site of their original

application, it is prudent to reduce the use of chemical pesticides outdoors as well as indoors. Depending on the site and pest to be controlled, one or more of the following steps can be effective: use of biological pesticides, such as Bacillus thuringiensis, for the control of gypsy moths; selection of disease resistant plants; and frequent washing of indoor plants and pets. Termite damage can be reduced or prevented by making certain that wooden building materials do not come into direct contact with the soil and by storing firewood away from the home. By appropriately fertilizing, watering, and aerating lawns, the need for chemical pesticide treatments of lawns can be dramatically reduced.

If you decide to use a pest control company, choose one carefully.

Ask for an inspection of your home and get a written control program for evaluation before you sign a contract. The control program should list specific names of pests to be controlled and chemicals to be used; it should also reflect any of your safety concerns. Insist on a proven record of competence and customer satisfaction.

Dispose of unwanted pesticides safely.

If you have unused or partially used pesticide containers you want to get rid of, dispose of them according to the directions on the label or on special household hazardous waste collection days. If there are no such collection days in your community, work with others to organize them.

Keep exposure to moth repellents to a minimum.

One pesticide often found in the home is paradichlorobenzene, a commonly used active ingredient in moth repellents. This chemical is known to cause cancer in animals, but substantial scientific uncertainty exists over the effects, if any, of long term human exposure to paradichlorobenzene. EPA requires that products containing paradichlorobenzene bear warnings such as avoid breathing vapors to warn users of potential short term toxic effects. Where possible, paradichlorobenzene, and items to be protected against moths, should be placed in trunks or other containers that can be stored in areas that are separately ventilated from the home, such as attics and detached garages. Paradichlorobenzene is also the key active ingredient in many air fresheners (in fact, some labels for moth repellents recommend that these same products be used as air fresheners or deodorants). Proper ventilation and basic household cleanliness will go a long way toward preventing unpleasant odors.

Call the National Pesticide Telecommunications Network (NPTN).

EPA sponsors the NPTN (800-858-PEST) to answer your questions about pesticides and to provide selected EPA publications on pesticides.

ASBESTOS

Asbestos is a mineral fiber that has been used commonly in a variety of building construction materials for insulation and as a fire retardant. EPA and CPSC have banned several asbestos products. Manufacturers have also voluntarily limited uses of asbestos. Today, asbestos is most commonly found in older homes, in pipe and furnace insulation materials, asbestos shingles, mill board, textured paints and other coating materials, and floor tiles.

Elevated concentrations of airborne asbestos can occur after asbestos containing materials are disturbed by cutting, sanding or other remodeling activities. Improper attempts to remove these materials can release asbestos fibers into the air in homes, increasing asbestos levels and endangering people living in those homes.

Health Effects of Asbestos

The most dangerous asbestos fibers are too small to be visible. After they are inhaled, they can remain and accumulate in the lungs. Asbestos can cause lung cancer, mesothelioma (a cancer of the chest and abdominal linings), and asbestosis (irreversible lung scarring that can be fatal). Symptoms of these diseases do not show up until many years after exposure began. Most people with asbestos related diseases were exposed to elevated concentrations on the job; some developed disease from exposure to clothing and equipment brought home from job sites.

Reducing Exposure to Asbestos in Homes

Learn how asbestos problems are created in homes. Read the booklet, Asbestos in Your Home, issued by CPSC, the ALA, and EPA.

To contact these organizations, see the section, Where to Go For More Information.

If you think your home may have asbestos, don t panic!

Usually it is best to leave asbestos material that is in good condition alone. Generally, material in good condition will not release asbestos fiber. There is no danger unless fibers are released and inhaled into the lungs.

Do not cut, rip, or sand asbestos containing materials.

Leave undamaged materials alone and, to the extent possible, prevent them from being damaged, disturbed, or touched. Periodically inspect for damage or deterioration. Discard damaged or worn asbestos gloves, stove top pads, or ironing board covers. Check with local health, environmental, or other appropriate officials to find out about proper handling and disposal procedures.

If asbestos material is more than slightly damaged, or if you are going to make changes in your home that might disturb it,

repair or removal by a professional is needed. Before you have your house remodeled, find out whether asbestos materials are present.

When you need to remove or clean up asbestos, use a professionally trained contractor.

Select a contractor only after careful discussion of the problems in your home and the steps the contractor will take to clean up or remove them. Consider the option of sealing off the materials instead of removing them.

Call EPA s TSCA assistance line (2025541404) to find out whether your state has a training and certification program for asbestos removal contractors and for information on EPA s asbestos programs.

LEAD

Lead has long been recognized as a harmful environmental pollutant. In late 1991, the Secretary of the Department of Health and Human Services called lead the number one environmental threat to the health of children in the United States. There are many ways in which humans are exposed to lead: through air, drinking water, food, contaminated soil, deteriorating paint, and dust. Airborne lead enters the body when an individual breathes or swallows lead particles or dust once it has settled. Before it was known how harmful lead could be, it was used in paint, gasoline, water pipes, and many other products.

Old lead based paint is the most significant source of lead exposure in the U.S. today. Harmful exposures to lead can be created when lead based paint is improperly removed from surfaces by dry scraping, sanding, or open flame burning. High concentrations of airborne lead particles in homes can also result from lead dust from outdoor sources, including contaminated soil tracked inside, and use of lead in certain indoor activities such as soldering and stained glass making.

Health Effects of Exposure to Lead

Lead affects practically all systems within the body. At high levels it can cause convulsions, coma, and even death. Lower levels of lead can adversely affect the brain, central nervous system, blood cells, and kidneys.

The effects of lead exposure on fetuses and young children can be severe. They include delays in physical and mental development, lower IQ levels, shortened attention spans, and increased behavioral problems. Fetuses, infants, and children are more vulnerable to lead exposure than adults since lead is more easily absorbed into growing bodies, and the tissues of small children are more sensitive to the damaging effects of lead. Children may have higher exposures since they are more likely to get lead dust on their hands and then put their fingers or other lead contaminated objects into their mouths.

Get your child tested for lead exposure. To find out where to do this, call your doctor or local health clinic. For more information on health effects, get a copy of the Centers for Disease Control s, Preventing Lead Poisoning in Young Children (October 1991).

Ways to Reduce Exposure to Lead

Keep areas where children play as dust free and clean as possible.

Mop floors and wipe window ledges and chewable surfaces such as cribs with a solution of powdered automatic dishwasher detergent in warm water. (Dishwasher detergents are recommended because of their high content of phosphate.) Most multipurpose cleaners will not remove lead in ordinary dust. Wash toys and stuffed animals regularly. Make sure that children wash their hands before meals, nap time, and bedtime.

Reduce the risk from lead based paint.

Most homes built before 1960 contain heavily leaded paint. Some homes built as recently as 1978 may also contain lead paint. This paint could be on window frames, walls, the outside of homes, or other surfaces. Do not burn painted wood since it may contain lead.

Leave lead based paint undisturbed if it is in good condition do not sand or burn off paint that may contain lead.

Lead paint in good condition is usually not a problem except in places where painted surfaces rub against each other and create dust (for example, opening a window).

Do not remove lead paint yourself.

Individuals have been poisoned by scraping or sanding lead paint because these activities generate large amounts of lead dust. Consult your state health or housing department for suggestions on which private laboratories or public agencies may be able to help test your home for lead in paint. Home test kits cannot detect small amounts of lead under some conditions. Hire a person with special training for correcting lead paint problems to remove lead based paint. Occupants, especially children and pregnant women, should leave the building until all work is finished and cleanup is done.

For additional information dealing with lead based paint abatement contact the Department of Housing and Urban Development for the following two documents: Comprehensive and Workable Plan for the Abatement of Lead Based Paint in Privately Owned Housing: Report to Congress (December 7, 1990) and Lead Based Paint: Interim Guidelines for Hazard Identification and Abatement in Public and Indian Housing (September 1990).

Do not bring lead dust into the home.

If you work in construction, demolition, painting, with batteries, in a radiator repair shop or lead factory, or your hobby involves lead, you may unknowingly bring lead into your home on your hands or clothes. You may also be tracking in lead from soil around your home. Soil very close to homes may be contaminated from lead paint on the outside of the building. Soil by roads and highways may be contaminated from years of exhaust fumes from cars and trucks that used leaded gas. Use door mats to wipe your feet before entering the home. If you work with lead in your job or a hobby, change your clothes before you go home and wash these clothes separately. Encourage your children to play in sand and grassy areas instead of dirt which sticks to fingers and toys. Try to keep your children from eating dirt, and make sure they wash their hands when they come inside.

Find out about lead in drinking water.

Most well and city water does not usually contain lead. Water usually picks up lead inside the home from household plumbing that is made with lead materials. The only way to know if there is lead in drinking water is to have it tested. Contact the local health department or the water supplier to find out how to get the water tested. Send for the EPA pamphlet, Lead and Your Drinking Water, for more information about what you can do if you have lead in your drinking water. Call EPA s Safe Drinking Water Hotline (8004264791) for more information.

Eat right.

A child who gets enough iron and calcium will absorb less lead. Foods rich in iron include eggs, red meats, and beans. Dairy products are high in calcium. Do not store food or liquid in lead crystal glassware or imported or old pottery. If you reuse old plastic bags to store or carry food, keep the printing on the outside of the bag.

You can get a brochure, Lead Poisoning and Your Children, and more information by calling the National Lead Information Center, 800-LEAD-FYI.

Building a new home provides the opportunity for preventing indoor air problems. However, it can result in exposure to higher levels of indoor air contaminants if careful attention is not given to potential pollution sources and the air exchange rate.

Express your concerns about indoor air quality to your architect or builder and enlist his or her cooperation in taking measures to provide good indoor air quality. Talk both about purchasing building materials and furnishings that are low emitting and about providing an adequate amount of ventilation.

The American Society of Heating, Refrigerating, and Air Conditioning Engineers recommends a ventilation rate of 0.35 ach (air changes per hour) for new homes, and some new homes are built to even tighter specifications. Particular care should be

given in such homes to preventing the buildup of indoor air pollutants to high levels.

Here are a few important actions that can make a difference:

Use radon resistant construction techniques.

Obtain a copy of the EPA booklet, Radon Resistant Construction Techniques for Residential Construction, from your state radon office or health agency, your state homebuilders association, or your EPA regional office.

Choose building materials and furnishings that will keep indoor air pollution to a minimum.

There are many actions a homeowner can take to select products that will prevent indoor air problems from occurring a couple of them are mentioned here. First, use exterior grade pressed wood products made with phenolformaldehyde resin in floors, cabinetry, and wall surfaces. Or, as an alternative, consider using solid wood products. Secondly, if you plan to install wall to wall carpet on concrete in contact with the ground, especially concrete in basements, make sure that an effective moisture barrier is installed prior to installing the carpet. Do not permanently adhere carpet to concrete with adhesives so that the carpet can be removed if it becomes wet.

Provide proper drainage and seal foundations in new construction.

Air that enters the home through the foundation can contain more moisture than is generated from all occupant activities.

Become familiar with mechanical ventilation systems and consider installing one.

Advanced designs of new homes are starting to feature mechanical systems that bring outdoor air into the home. Some of these designs include energy efficient heat recovery ventilators (also known as air to air heat exchangers).

Ensure that combustion appliances, including furnaces, fireplaces, wood stoves, and heaters, are properly vented and receive enough supply air.

Combustion gases, including carbon monoxide, and particles can be back drafted from the chimney or flue into the living space if the combustion appliance is not properly vented or does not receive enough supply air. Back drafting can be a particular problem in weatherized or tightly constructed homes. Installing a dedicated outdoor air supply for the combustion appliance can help prevent back drafting.

Indoor air quality problems are not limited to homes. In fact, many office buildings have significant air pollution sources. Some of these buildings may be inadequately ventilated. For example, mechanical ventilation systems may not be designed or

operated to provide adequate amounts of outdoor air. Finally, people generally have less control over the indoor environment in their offices than they do in their homes. As a result, there has been an increase in the incidence of reported health problems.

HEALTH EFFECTS

A number of well identified illnesses, such as Legionnaire s disease, asthma, hypersensitivity pneumonitis, and humidifier fever, have been directly traced to specific building problems. These are called building related illnesses. Most of these diseases can be treated nevertheless, some pose serious risks.

Sometimes, however, building occupants experience symptoms that do not fit the pattern of any particular illness and are difficult to trace to any specific source. This phenomenon has been labeled sick building syndrome. People may complain of one or more of the following symptoms: dry or burning mucous membranes in the nose, eyes, and throat; sneezing; stuffy or runny nose; fatigue or lethargy; headache; dizziness; nausea; irritability an forgetfulness. Poor lighting, noise, vibration, thermal discomfort, and psychological stress may also cause, or contribute to, these symptoms.

There is no single manner in which these health problems appear. In some cases, problems begin as workers enter their offices and diminish as workers leave; other times, symptoms continue until the illness is treated. Sometimes there are outbreaks of illness among many workers in a single building; in other cases, health symptoms show up only in individual workers.

In the opinion of some World Health Organization experts, up to 30 percent of new or remodeled commercial buildings may have unusually high rates of health and comfort complaints from occupants that may potentially be related to indoor air quality.

WHAT CAUSES PROBLEMS?

Three major reasons for poor indoor air quality in office buildings are the presence of indoor air pollution sources; poorly designed, maintained, or operated ventilation systems; and uses of the building that were unanticipated or poorly planned for when the building was designed or renovated.

Sources of Office Air Pollution

As with homes, the most important factor influencing indoor air quality is the presence of pollutant sources. Commonly found office pollutants and their sources include environmental tobacco smoke; asbestos from insulating and fire retardant building supplies; formaldehyde from pressed wood products; other organics from building materials, carpet, and other office furnishings, cleaning materials and activities, rest room air fresheners, paints, adhesives, copying machines, and photography and print shops; biological contaminants from dirty ventilation systems or water damaged walls, ceilings, and carpets; and pesticides from

pest management practices.

Ventilation Systems

Mechanical ventilation systems in large buildings are designed and operated not only to heat and cool the air, but also to draw in and circulate outdoor air. If they are poorly designed, operated, or maintained, however, ventilation systems can contribute to indoor air problems in several ways.

For example, problems arise when, in an effort to save energy, ventilation systems are not used to bring in adequate amounts of outdoor air. Inadequate ventilation also occurs if the air supply and return vents within each room are blocked or placed in such a way that outdoor air does not actually reach the breathing zone of building occupants. Improperly located outdoor air intake vents can also bring in air contaminated with automobile and truck exhaust, boiler emissions, fumes from dumpsters, or air vented from rest rooms. Finally, ventilation systems can be a source of indoor pollution themselves by spreading biological contaminants that have multiplied in cooling towers, humidifiers, dehumidifiers, air conditioners, or the inside surfaces of ventilation duct work.

Use of the Building

Indoor air pollutants can be circulated from portions of the building used for specialized purposes, such as restaurants, print shops, and dry cleaning stores, into offices in the same building. Carbon monoxide and other components of automobile exhaust can be drawn from underground parking garages through stairwells and elevator shafts into office spaces.

In addition, buildings originally designed for one purpose may end up being converted to use as office space. If not properly modified during building renovations, the room partitions and ventilation system can contribute to indoor air quality problems by restricting air recirculation or by providing an inadequate supply of outdoor air.

WHAT TO DO IF YOU SUSPECT A PROBLEM

If you or others at your office are experiencing health or comfort problems that you suspect may be caused by indoor air pollution, you can do the following:

Talk with other workers, your supervisor, and union representatives to see if the problems are being experienced by others and urge that a record of reported health complaints be kept by management, if one has not already been established.

Talk with your own physician and report your problems to the company physician, nurse, or health and safety officer.

Call your state or local health department or air pollution control agency to talk over the symptoms and possible causes.

Encourage building management to obtain a copy of Building Air Quality: A Guide for Building Owners and Facility Managers. Building Air Quality (BAQ) is simply written, yet provides comprehensive information for identifying, correcting, and preventing indoor air quality problems. BAQ also provides supporting information such as when and how to select outside technical assistance, how to communicate with others regarding indoor air issues, and where to find additional sources of information. BAQ is available for $24 from U.S. GPO, Superintendent of Documents, P.O. Box 371954, Pittsburgh, PA 152507954; stock #055000003904.

Frequently, indoor air quality problems in large commercial buildings cannot be effectively identified or remedied without a comprehensive building investigation. These investigations may start with written questionnaires and telephone consultations in which building investigators assess the history of occupant symptoms and building operation procedures. In some cases, these inquiries may quickly uncover the problem and on site visits are unnecessary.

More often, however, investigators will need to come to the building to conduct personal interviews with occupants, to look for possible sources of the problems, and to inspect the design and operation of the ventilation system and other building features. Because taking measurements of pollutants at the very low levels often found in office buildings is expensive and may not yield information readily useful in identifying problem sources, investigators may not take many measurements. The process of solving indoor air quality problems that result in health and comfort complaints can be a slow one, involving several trial solutions before successful remedial actions are identified.

If a professional company is hired to conduct a building investigation, select a company on the basis of its experience in identifying and solving indoor air quality problems in nonindustrial buildings.

Work with others to establish a smoking policy that eliminates involuntary nonsmoker exposure to environmental tobacco smoke.

Call the National Institute for Occupational Safety and Health (NIOSH) for information on obtaining a health hazard evaluation of your office (800-35-N-EACH), or contact the Occupational Safety and Health Administration, (202) 2198151.

Federal Information Services

Federal agencies with indoor air quality information may be contacted as follows:

U.S. Environmental Protection Agency (EPA)
Public Information Center
401 M St., SW
Washington, DC 20460
(202) 260-7751

Indoor Air Quality Information Clearinghouse (IAQ INFO)
P.O. Box 37133
Washington, DC 200137133
(800) 438-4318
(301) 585-9020

Operates Monday to Friday from 9 to 5 Eastern Standard Time (EST). Distributes EPA publications, answers questions on the phone, and makes referrals to other nonprofit and governmental organizations.

National Radon Hotline
(800) SOS-RADON
Information recording operates 24 hours a day.

National Lead Information Center
(800) LEAD-FYI

Operates 24 hours a day, seven days a week. Callers may order an information package. To speak to an information specialist, call (800)4245323. Operates Monday to Friday from 8:30 to 5 EST.

National Pesticides Telecommunications Network
National toll free number: (800) 858-PEST
In Texas: (806) 7433091

Operates Monday to Friday from 8 to 6 Central Standard Time. Provides information about pesticides to the general public and the medical, veterinary, and professional communities.

RCRA/Super fund Hotline
National toll free number: (800) 4249346
In Washington, DC area: (703) 4129810

Operates Monday to Friday from 8:30 to 7:30 EST. Provides information on regulations under both the Resources Conservation and Recovery Act (including solid and hazardous waste issues) and the Superfund law.

Safe Drinking Water Hotline
(800) 4264791

Operates Monday to Friday from 8:30 to 5 EST. Provides information on regulations under the Safe Drinking Water Act, lead and radon in drinking water, filter information, and a list of state drinking water offices.

TSCA Assistance Information Service
(202) 5541404

Operates Monday to Friday from 8:30 to 5 EST. Provides information on regulations under the Toxic Substances Control Act and on EPA's asbestos program.

U.S. Consumer Product Safety Commission (CPSC)
Washington, DC 202070001
Product Safety Hotline: (800) 638-CPSC

Teletypewriter for the hearing impaired (outside Maryland): (800) 638-8270; Maryland only: (800) 492-8104. Recorded information is available 24 hours a day when calling from a touch tone phone. Operators are on duty Monday to Friday from 10:30 to 4 EST to take complaints about unsafe consumer products.

U.S. Department of Housing and Urban Development
Office of Energy and the Environment
Washington, DC 20410
HUD USER National toll free number: (800) 245-2691
In Washington, DC area: (301) 251-5154.

U.S. Department of Energy
Office of Conservation and Renewable Energy
1000 Independence Ave., SW
Washington, DC 20585

Conservation and Renewable Energy Inquiry and Referral Service (CAREIRS)
PO Box 3048, Merrifield, VA 22116; (800) 523-2929.

Operates Monday to Friday from 9 to 5 EST. Provides consumer information on conservation and renewable energy in residences.

U.S. Public Health Service
Division of Federal Occupational Health
Office of Environmental Hygiene, Region III, Room 1310
3535 Market St., Philadelphia, PA 19104
(215) 596-1888; fax: 215-596-5024

Provides indoor air quality consultative services to federal agency managers.

Centers for Disease Control and Prevention
Lead Poisoning Prevention Branch
4770 Buford Highway, NE (F42), Atlanta, GA 30341-3724
(800) 488-7330

Office on Smoking and Health
Centers for Disease Control and Prevention
U.S. Department of Health and Human Services

4770 Buford Highway, NE (K50), Atlanta, GA 30341-3724
(404) 488-5701

Occupational Safety and Health Administration
Office of Information and Consumer Affairs
Room N-3647
200 Constitution Avenue, NW, Washington, DC 20210
(202) 219-8151

Bonneville Power Administration
Portland, OR 97208

General Services Administration
18th and F Streets, NW, Washington, DC 20405

Tennesee Valley Authority

Industrial Hygiene Branch

Multipurpose Building (1B), Muscle Shoals, AL 35660

State and Local Organizations

Your questions or concerns about indoor air problems can frequently be answered by the government agencies in your state or local government. Responsibilities or indoor air quality issues are usually divided among many different agencies. Calling or writing the agencies responsible for health or air quality control is the best way to start getting information from your state or local government. To obtain state agency contacts, write or call EPA s IAQ Information Clearinghouse, (800) 4384318.

CPSC REGIONAL OFFICES

Eastern Regional Center
6 World Trade Center
Vesey Street, 3rd Floor Room 350
New York, NY 10048-0950
(212) 466-1612

Central Regional Center
230 South Dearborn Street Room 2944
Chicago, IL 60604-1601
(312) 353-8260

Western Regional Center
600 Harrison Street Room 245
San Francisco, CA 94107
(415) 744-2966

States in Region
Connecticut, District of Columbia, Delaware, Florida, Massachusetts, Maryland, Maine, North Carolina, New Hampshire, New York, Pennsylvania, South Carolina, Rhode Island, Virginia, Vermont, West Virginia

Alabama, Georgia, Iowa, Illinois, Indiana, Kansas, Kentucky, Michigan, Minnesota, Missouri, Mississippi, North Dakota, Nebraska, Ohio, South Dakota, Tennessee, Wisconsin

Alaska, Arkansas, Arizona, California, Colorado, Hawaii, Idaho, Louisiana, Montana, New Mexico, Nevada, Oklahoma, Oregon, Texas, Utah, Washington, Wyoming

EPA REGIONAL OFFICES

Address inquiries to the Indoor Air Coordinators in the EPA regional offices at the following addresses:

Region 1
EPA
John F. Kennedy Federal Building
Boston, MA 02203
617-565-4502

Region 2
EPA (2AWM-RAD)
26 Federal Plaza
New York, NY 10278
212-264-4418

Region 3
EPA
841 Chestnut Building
Philadelphia, PA 19107
215-595-8322
215-597-4084 (radon)

Region 4
EPA
345 Courtland Street NE
Atlanta, GA 30365
404-347-2864

Region 5
EPA AT-18L
77 W. Jackson Blvd.
Chicago, IL 60604
312-353-2205

Region 6
EPA
First Interstate Bank Tower
1445 Ross Avenue
Dallas, TX 75202
214-655-7223

Region 7
EPA ARTX / ARBR-RAID
726 Minnesota Avenue
Kansas City, KS 66101
913-551-7222

Region 8
EPA 999 18th Street, Suite 500
Denver, CO 80202-2466
303-293-1709

The following organizations have information discussed in this booklet. EPA s IAQ Information Clearinghouse, (800)438-4318, can provide the names of a variety of organizations that have information on all of the issues discussed in this publication.

American Association of Poison Control Centers
3800 Reservoir Rd., NW

Washington, DC 20007

American Society of Heating, Refrigerating, and Air-Conditioning (ASHRAE)
1791 Tullie Circle NE
Atlanta, GA 30329

World Health Organization
Publications Center
49 Sheridan Avenue
Albany, NY 12210

Your local American Lung Association (ALA)
1740 Broadway
New York, NY 10019
(800) LUNG-USA

GLOSSARY

Acid aerosol
Acidic liquid or solid particles that are small enough to become airborne. High concentrations of acid aerosols can be irritating to the lungs and have been associated with some respiratory diseases, such as asthma.

Animal dander
Tiny scales of animal skin.

Allergen
A substance capable of causing an allergic reaction because of an individual s sensitivity to that substance.

Allergic rhinitis
Inflammation of the mucous membranes in the nose that is caused by an allergic reaction.

Building-related illness
A discrete, identifiable disease or illness that can be traced to a specific pollutant or source within a building. (Contrast with Sick building syndrome).

Chemical sensitization
Evidence suggests that some people may develop health problems characterized by effects such as dizziness, eye and throat irritation, chest tightness, and nasal congestion that appear whenever they are exposed to certain chemicals. People may react to even trace amounts of chemicals to which they have become sensitized.

Environmental tobacco smoke
Mixture of smoke from the burning end of a cigarette, pipe, or cigar and smoke exhaled by the smoker (also secondhand smoke or passive smoking).

Fungi
Any of a group of parasitic lower plants that lack chlorophyll, including molds and mildews.

Humidifier fever
A respiratory illness caused by exposure to toxins from microorganisms found in wet or moist areas in humidifiers and air conditioners. Also called air conditioner or ventilation fever.

Hypersensitivity pneumonitis
A group of respiratory diseases that cause inflammation of the lung (specifically granulomatous cells). Most forms of hypersensitivity pneumon-itis are caused by the inhalation of organic dusts, including molds.

Organic compounds
Chemicals that contain carbon. Volatile organic compounds vaporize at room temperature and pressure. They are found in many indoor sources, including many common household products and building materials.

Picocurie
A unit for measuring radioactivity, often expressed as picocuries per liter of air.

Pressed wood products
A group of materials used in building and furniture construction that are made from wood veneers, particles, or fibers bonded together with an adhesive under heat and pressure.

Radon and radon decay products
Radon is a radioactive gas formed in the decay of uranium. The radon decay products (also called radon daughters or progeny) can be breathed into the lung where they continue to release radiation as they further decay.

Sick building syndrome
Term that refers to a set of symptoms that affect some number of building occupants during the time they spend in the building and diminish or go away during periods when they leave the building. Cannot be traced to specific pollutants or sources within the building. (Contrast with Building related illness).

Ventilation rate
The rate at which indoor air enters and leaves a building. Expressed in one of two ways: the number of changes of outdoor air per unit of time (air changes per hour, or ach) or the rate at which a volume of outdoor air enters per unit of time (cubic feet per minute, or cfm)

2. A GUIDE TO FAT

Once upon a time, we didn't know anything about fat except that it made foods tastier. We cooked our food in lard or shortening. We spread butter on our breakfast toast and plopped sour cream on our baked potatoes. Farmers bred their animals to produce milk with high butterfat content and meat "marbled" with fat because that was what most people wanted to eat.

But ever since word got out that diets high in fat are related to heart disease, things have become more complicated. Experts tell us there are several different kinds of fat, some of them worse for us than others. In addition to saturated, monounsaturated and polyunsaturated fats, there are triglycerides, trans fatty acids, and omega 3 and omega 6 fatty acids.

Most people have learned something about cholesterol, and many of us have been to the doctor for a blood test to learn our cholesterol "number." Now, however, it turns out that there's more than one kind of cholesterol, too.

Almost every day there are newspaper reports of new studies or recommendations about what to eat or what not to eat: Lard is bad, olive oil is good, margarine is better for you than butter--then again, maybe it's not.

Amid the welter of confusing terms and conflicting details, consumers are often baffled about how to improve their diets.

FDA recently issued new regulations that will enable consumers to see clearly on a food product's label how much and what kind of fat the product contains. (See "A Little Lite Reading" in the June 1993 FDA Consumer.) Understanding the terms used to discuss fat is crucial if you want to make sure your diet is within recommended guidelines (see accompanying article).

Fats and Fatty Acids

Fats are a group of chemical compounds that contain fatty acids. Energy is stored in the body mostly in the form of fat. Fat is needed in the diet to supply essential fatty acids, substances essential for growth but not produced by the body itself.

There are three main types of fatty acids: saturated, monounsaturated and polyunsaturated. All fatty acids are molecules composed mostly of carbon and hydrogen atoms. A saturated fatty acid has the maximum possible number of hydrogen atoms attached to every carbon atom. It is therefore said to be "saturated" with hydrogen atoms.

Some fatty acids are missing one pair of hydrogen atoms in the middle of the molecule. This gap is called an "unsaturation" and the fatty acid is said to be "monounsaturated" because it has one gap. Fatty acids that are missing more than one pair of hydrogen atoms are called "polyunsaturated."

Saturated fats (which contain saturated fatty acids) are mostly found in foods of animal origin. Monounsaturated and polyunsaturated fats (which contain monounsaturated and polyunsaturated fatty acids) are mostly found in foods of plant origin and some seafoods. Polyunsaturated fatty acids are of two kinds, omega-3 or omega-6. Scientists tell them apart by where in the molecule the "unsaturations," or missing hydrogen atoms, occur.

Recently a new term has been added to the fat lexicon: trans fatty acids. These are byproducts of partial hydrogenation, a process in which some of the missing hydrogen atoms are put back into polyunsaturated fats. "Partially hydrogenated vegetable oils," such as vegetable shortening and margarine, are solid at room temperature.

Cholesterol

Cholesterol is sort of a "cousin" of fat. Both fat and cholesterol belong to a larger family of chemical compounds called lipids. All the cholesterol the body needs is made by the liver. It is used to build cell membranes and brain and nerve tissues. Cholesterol also helps the body produce steroid hormones needed for body regulation, including processing food, and bile acids needed for digestion.

People don't need to consume dietary cholesterol because the body can make enough cholesterol for its needs. But the typical U.S. diet contains substantial amounts of cholesterol, found in foods such as egg yolks, liver, meat, some shellfish, and whole-milk dairy products. Only foods of animal origin contain cholesterol.

Cholesterol is transported in the bloodstream in large molecules of fat and protein called lipoproteins. Cholesterol carried in low-density lipoproteins is called LDL-cholesterol; most cholesterol is of this type. Cholesterol carried in high-density lipoproteins is called HDL-cholesterol. (See "Fat Words.")

A person's cholesterol "number" refers to the total amount of cholesterol in the blood. Cholesterol is measured in milligrams per deciliter (mg/dl) of blood. (A deciliter is a tenth of a liter.)

Doctors recommend that total blood cholesterol be kept below 200 mg/dl. The average level in adults in this country is 205 to 215 mg/dl. Studies in the United States and other countries have consistently shown that total cholesterol levels above 200 to 220 mg/dl are linked with an increased risk of coronary heart disease. (See "Lowering Cholesterol" in the March 1994 FDA Consumer.)

LDL-cholesterol and HDL-cholesterol act differently in the body. A high level of LDL-cholesterol in the blood increases the risk of fatty deposits forming in the arteries, which in turn increases the risk of a heart attack. Thus, LDL-cholesterol has been dubbed "bad" cholesterol.

On the other hand, an elevated level of HDL-cholesterol seems to have a protective effect against heart disease. For this reason, HDL-cholesterol is often called "good" cholesterol.

In 1992, a panel of medical experts convened by the National Institutes of Health (NIH) recommended that individuals should have their level of HDL-cholesterol checked along with their total cholesterol.

According to the National Heart, Lung, and Blood Institute (NHLBI), a component of NIH, a healthy person who is not at high risk for heart disease and whose total cholesterol level is in the normal range (around 200 mg/dl) should have an HDL-cholesterol level of more than 35 mg/dl. NHLBI also says that an LDL-cholesterol level of less than 130 mg/dl is "desirable" to minimize the risk of heart disease.

Some very recent studies have suggested that LDL-cholesterol is more likely to cause fatty deposits in the arteries if it has been through a chemical change known as oxidation. However, these findings are not accepted by all scientists.

The NIH panel also advised that individuals with high total cholesterol or other risk factors for coronary heart disease should have their triglyceride levels checked along with their HDL-cholesterol levels.

Triglycerides and VLDL

Triglyceride is another form in which fat is transported through the blood to the body tissues. Most of the body's stored fat is in the form of triglycerides. Another lipoprotein--very low-density lipoprotein, or VLDL--has the job of carrying triglycerides in the blood. NHLBI considers a triglyceride level below 250 mg/dl to be normal.

It is not clear whether high levels of triglycerides alone increase an individual's risk of heart disease. However, they may be an important clue that someone is at risk of heart disease for other reasons. Many people who have elevated triglycerides also have high LDL-cholesterol or low HDL-cholesterol. People with diabetes or kidney disease--two conditions that increase the risk of heart disease--are also prone to high triglycerides.

Dietary Fat and Cholesterol Levels

Many people are confused about the effect of dietary fats on cholesterol levels. At first glance, it seems reasonable to think that eating less cholesterol would reduce a person's cholesterol level. In fact, eating less cholesterol has less effect on blood cholesterol levels than eating less saturated fat. However, some studies have found that eating cholesterol increases the risk of heart disease even if it doesn't increase blood cholesterol levels.

Another misconception is that people can improve their cholesterol numbers by eating "good" cholesterol. In food, all cholesterol is the same. In the blood, whether cholesterol is "good" or "bad" depends on the type of lipoprotein that's carrying it.

Polyunsaturated and monounsaturated fats do not promote the formation of artery-clogging fatty deposits the way saturated fats do. Some studies show that eating foods that contain these fats can reduce levels of LDL-cholesterol in the blood. Polyunsaturated fats, such as safflower and corn oil, tend to lower both HDL- and LDL-cholesterol. Edible oils rich in monounsaturated fats, such as olive and canola oil, however, tend to lower LDL-cholesterol without affecting HDL levels.

How Do We Know Fat's a Problem?

In 1908, scientists first observed that rabbits fed a diet of meat, whole milk, and eggs developed fatty deposits on the walls of their arteries that constricted the flow of blood. Narrowing of the arteries by these fatty deposits is called atherosclerosis. It is a slowly progressing disease that can begin early in life but not show symptoms for many years. In 1913, scientists identified the substance responsible for the fatty deposits in the rabbits' arteries as cholesterol.

In 1916, Cornelius de Langen, a Dutch physician working in Java, Indonesia, noticed that native Indonesians had much lower rates of heart disease than Dutch colonists living on the island. He reported this finding to a medical journal, speculating that the Indonesians' healthy hearts were linked with their low levels of blood cholesterol.

De Langen also noticed that both blood cholesterol levels and rates of heart disease soared among Indonesians who abandoned their native diet of mostly plant foods and ate a typical Dutch diet containing a lot of meat and dairy products. This was the first recorded suggestion that diet, cholesterol levels, and heart disease were related in humans. But de Langen's observations lay unnoticed in an obscure medical journal for more than 40 years.

After World War II, medical researchers in Scandinavia noticed that deaths from heart disease had declined dramatically during the war, when food was rationed and meat, dairy products, and eggs were scarce. At about the same time, other researchers found that people who suffered heart attacks had higher levels of blood cholesterol than people who did not have heart attacks.

Since then, a large body of scientific evidence has been gathered linking high blood cholesterol and a diet high in animal fats with an elevated risk of heart attack. In countries where the average person's blood cholesterol level is less than 180 mg/dl, very few people develop atherosclerosis or have heart attacks. In many countries where a lot of people have blood cholesterol levels above 220 mg/dl, such as the United States, heart disease is the leading cause of death.

High rates of heart disease are commonly found in countries where the diet is heavy with meat and dairy products containing a lot of saturated fats. However, high-fat diets and high rates of heart disease don't inevitably go hand-in-hand.

Learning from Other Cultures

People living on the Greek island of Crete have very low rates of heart disease even though their diet is high in fat. Most of their dietary fat comes from olive oil, a monounsaturated fat that tends to lower levels of "bad" LDL-cholesterol and maintain levels of "good" HDL-cholesterol.

The Inuit, or Eskimo, people of Alaska and Greenland also are relatively free of heart disease despite a high-fat, high-cholesterol diet. The staple food in their diet is fish rich in omega-3 polyunsaturated fatty acids.

Some research has shown that omega-3 fatty acids, found in fish such as salmon and mackerel as well as in soybean and canola oil, lower both LDL-cholesterol and triglyceride levels in the blood. Some nutrition experts recommend eating fish once or twice a week to reduce heart disease risk. However, dietary supplements containing concentrated fish oil are not recommended because there is insufficient evidence that they are beneficial and little is known about their long-term effects.

Omega-6 polyunsaturated fatty acids have also been found in some studies to reduce both LDL- and HDL-cholesterol levels in the blood. Linoleic acid, an essential nutrient (one that the body cannot make for itself) and a component of corn, soybean and safflower oil, is an omega-6 fatty acid.

At one time, many nutrition experts recommended increasing consumption of monounsaturated and polyunsaturated fats because of their cholesterol-lowering effects. Now, however, the advice is simply to reduce dietary intake of all types of fat. (Infants and young children, however, should not restrict dietary fat.)

The available information on fats may be voluminous and is sometimes confusing. But sorting through the information becomes easier once you know the terms and some of the history.

The "bottom line" is actually quite simple, according to John E. Vanderveen, Ph.D., director of the Office of Plant and Dairy Foods and Beverages in FDA's Center for Food Safety and Applied Nutrition. What we should be doing is removing as much of the saturated fat from our diet as we can. We need to select foods that are lower in total fat and especially in saturated fat." In a nutshell, that means eating fewer foods of animal origin, such as meat and whole-milk dairy products, and more plant foods such as vegetables and grains. n

Eleanor Mayfield is a writer in Silver Spring, Md.

Fat Words

Here are brief definitions of the key terms important to an understanding of the role of fat in the diet.

Cholesterol: A chemical compound manufactured in the body. It is used to build cell membranes and brain and nerve tissues. Cholesterol also helps the body make steroid hormones and bile acids.

Dietary cholesterol: Cholesterol found in animal products that are part of the human diet. Egg yolks, liver, meat, some shellfish, and whole-milk dairy products are all sources of dietary cholesterol.

Fatty acid: A molecule composed mostly of carbon and hydrogen atoms. Fatty acids are the building blocks of fats.

Fat: A chemical compound containing one or more fatty acids. Fat is one of the three main constituents of food (the others are protein and carbohydrate). It is also the principal form in which energy is stored in the body.

Hydrogenated fat: A fat that has been chemically altered by the addition of hydrogen atoms (see trans fatty acid). Vegetable oil and margarine are hydrogenated fats.

Lipid: A chemical compound characterized by the fact that it is insoluble in water. Both fat and cholesterol are members of the lipid family.

Lipoprotein: A chemical compound made of fat and protein. Lipoproteins that have more fat than protein are called low-density lipoproteins (LDLs). Lipoproteins that have more protein than fat are called high-density lipoproteins (HDLs). Lipoproteins are found in the blood, where their main function is to carry cholesterol.

Monounsaturated fatty acid: A fatty acid that is missing one pair of hydrogen atoms in the middle of the molecule. The gap is called an "unsaturation." Monounsaturated fatty acids are found mostly in plant and sea foods.

Monounsaturated fat: A fat made of monounsaturated fatty acids. Olive oil and canola oil are monounsaturated fats. Monounsaturated fats tend to lower levels of LDL-cholesterol in the blood.

Polyunsaturated fatty acid: A fatty acid that is missing more than one pair of hydrogen atoms. Polyunsaturated fatty acids are mostly found in plant and sea foods.

Polyunsaturated fat: A fat made of polyunsaturated fatty acids. Safflower oil and corn oil are polyunsaturated fats. Polyunsaturated fats tend to lower levels of both HDL-cholesterol and LDL-cholesterol in the blood.

Saturated fatty acid: A fatty acid that has the maximum possible number of hydrogen atoms attached to every carbon atom. It is said to be "saturated" with hydrogen atoms. Saturated fatty acids are mostly found in animal products such as meat and whole milk.

Saturated fat: A fat made of saturated fatty acids. Butter and lard are saturated fats. Saturated fats tend to raise levels of LDL-cholesterol ("bad" cholesterol) in the blood. Elevated levels of LDL-cholesterol are associated with heart disease.

Trans fatty acid: A polyunsaturated fatty acid in which some of the missing hydrogen atoms have been put back in a chemical process called hydrogenation. Trans fatty acids are the building blocks of hydrogenated fats. n

--E.M.
Government Advice

Dietary guidelines endorsed by the U.S. Department of Agriculture and the U.S. Department of Health and Human Services advise consumers to:

Reduce total dietary fat intake to 30 percent or less of total calories.

Reduce saturated fat intake to less than 10 percent of calories.

Reduce cholesterol intake to less than 300 milligrams daily

3. EMERGENCY PREPARDNESS CHECKLIST

TORNADO*FLASHFLOODS*WINTERSTORM* HURRICANE*FIRE*HAZARDOUS* MATERIALS SPILL

The next time disaster strikes, you may not have much time to act. Prepare now for a sudden emergency.

Learn how to protect yourself and cope with disaster by planning ahead. This checklist will help you get started. Discuss these ideas with your family, then prepare an emergency plan. Post the plan where everyone will see it--on the refrigerator or bulletin board.

For additional information about how to prepare for hazards in your community, contact your local emergency management or civil defense office and American Red Cross chapter.

Emergency Checklist

Call Your Emergency Management Office or American Red Cross Chapter

* Find out which disasters could occur in your area.
* Ask how to prepare for each disaster.
* Ask how you would be warned of an emergency.
* Learn your community's evacuation routes.

* Ask about special assistance for elderly or disabled persons.

Also...

* Ask your workplace about emergency plans.
* Learn about emergency plans for your children's school or day care center.

Create an Emergency Plan

* Meet with household members. Discuss with children the dangers of fire, severe weather, earthquakes and other emergencies.
* Discuss how to respond to each disaster that could occur.
* Discuss what to do about power outages and personal injuries.
* Draw a floor plan of your home. Mark two escape routes from each room.
* Learn how to turn off the water, gas and electricity at main switches.
* Post emergency telephone numbers near telephones.
* Teach children how and when to call 911, police and fire.
* Instruct household members to mm on the radio for emergency information.
* Pick one out-of-state and one local friend or relative for family members to call if separated by disaster (it is often easier to call out-of-state than within the affected area).
* Teach children how to make long distance telephone calls.
* Pick two meeting places.

  1) A place near your home in case of a fire.
  2) A place outside your neighborhood in case you cannot return home after a disaster.

* Take a basic first aid and CPR class.
* Keep family records in a water and fire-proof container.

Prepare a Disaster Supplies Kit

Assemble supplies you might need in an evacuation. Store them in an easy-to-carry container such as a backpack or duffle bag.

Include:

* A supply of water (one gallon per person per day). Store water in sealed, unbreakable containers. Identify the storage date and replace every six months.
* A supply of non-perishable packaged or canned food and a non-electric can opener.
* A change of clothing, rain gear and sturdy shoes.
* Blankets or sleeping bags.
* A first aid kit and prescription medications.
* An extra pair of glasses.
* A battery-powered radio, flashlight and plenty of extra batteries.
* Credit cards and cash.
* An extra set of car keys.
* A list of family physicians.
* A list of important family information; the style and serial number of medical devices such as pacemakers.
* Special items for infants, elderly or disabled family members.

Emergency Plan

Out-of-State Contact

Name_____

City_____

Telephone (Day)_____(Evening)_____

Local Contact

Name_____

Telephone (Day)_____(Evening)_____

Nearest Relative

Name_____

City_____

Telephone (Day)_____(Evening)_____

Family Work Numbers

Father_____Mother_____

Other_____

Emergency Telephone Numbers

In a life threatening emergency, dial 911 or the local emergency medical services system number.

Police Department_____

Fire Department_____

Hospital_____

Family Physicians

Name_____Telephone_____

Name_____Telephone_____

Name_____Telephone_____

Reunion Locations

1. Right outside your home_____

_____

2. Away from the neighborhood, in case you cannot

return home_____

_____

Address_____

Telephone_____

Route to try first_____

_____

Escape Plan

In a fire or other emergency, you may need to evacuate your house, apartment or mobile home on a moment's notice. You should be ready to get out fast.

Develop an escape plan by drawing a floor plan of your residence. Using a black or blue pen, show the location of doors, windows, stairways, and large furniture. Indicate the location of emergency supplies (Disaster Supplies Kit), fire extinguishers, smoke detectors, collapsible ladders, first aid kits and utility shut off points. Next, use a colored pen to draw a broken line charting at least two escape routes from each room. Finally, mark a place outside of the home where household members should meet in case of fire.

Be sure to include important points outside such as garages, patios, stairways, elevators, driveways and porches. If your home has more than two floors, use an additional sheet of paper. Practice emergency evacuation drills with all household members at least two times each year.

Example:

Home Hazard Hunt

In a disaster, ordinary items in the home can cause injury and damage. Anything that can move, fall, break or cause a fire is a potential hazard.

* Repair defective electrical wiring and leaky gas connections.

* Fasten shelves securely.

* Place large, heavy objects on lower shelves.

* Hang pictures and minors away from beds.
* Brace overhead light fixtures.
* Secure water heater. Snap to wall studs.
* Repair cracks in ceilings or foundations.
* Store weed killers, pesticides and flammable products away from heat sources.
* Place oily polishing rags or waste in covered metal cans.
* Clean and repair chimneys, flue pipes, vent connectors and gas vents.

If You Need to Evacuate

* Listen to a battery powered radio for the location of emergency shelters. Follow instructions of local officials.
* Wear protective clothing and sturdy shoes.
* Take your Disaster Supplies Kit.
* Lock your house.
* Use travel routes specified by local officials.

If you are sure you have time ...

* Shut off water, gas and electricity, if instructed to do so.
* Let others know when you left and where you are going.
* Make arrangements for pets. Animals may not be allowed in public shelters.

Prepare an Emergency Car Kit

Include:

* Battery powered radio and extra batteries
* Flashlight and extra batteries
* Blanket

* Booster cables

* Fire extinguisher (5 lb, A-B-C type)

* First aid kit and manual

* Bottled water and non-perishable high energy foods such as granola bars, raisins and peanut butter.

* Maps

* Shovel

* Tire repair kit and pump

* Flares

Fire Safety

* Plan two escape routes out of each room.

* Teach family members to stay low to the ground when escaping from a fire.

* Teach family members never to open doors that are hot. In a fire, feel the bottom of the door with the palm of your hand. If it is hot, do not open the door. Find another way out.

* Install smoke detectors. Clean and test smoke detectors once a month. Change batteries at least once a year.

* Keep a whistle in each bedroom to awaken household members in case of fire.

* Check electrical outlets. Do not overload outlets.

* Purchase a fire extinguisher (5 lb., A-B-C type).

* Have a collapsible ladder on each upper floor of your house.

* Consider installing home sprinklers.

4. GUIDE TO HEALTH INSURANCE FOR PEOPLE WITH MEDICARE

* WHAT MEDICARE PAYS AND DOESN'T PAY

    * 10 STANDARD MEDIGAP INSURANCE PLANS

    * YOUR RIGHT TO MEDIGAP INSURANCE

    * TIPS ON SHOPPING FOR PRIVATE HEALTH INSURANCE

Developed jointly by the National Association of Insurance Commissioners and the Health Care Financing Administration of the U.S. Department of Health and Human Services.

Publication No. HCFA-02110

-NOTICE -

Listed in the back of this booklet are the addresses and telephone numbers of each of the state agencies on aging and the state insurance departments. They are available to assist you with any questions you may have about private insurance to supplement Medicare.

Suspected violations of the laws governing the marketing of insurance policies should generally be reported to your state insurance department since states are responsible for the regulation of insurance within their boundaries.

There are, however, federal penalties for certain violations concerning Medicare supplement insurance ("Medigap") policies. It is, for example, a federal offense for an insurance agent to indicate that he or she represents the Medicare program or any other federal agency in order to sell a policy. It is also illegal for an insurance company or agent to sell you a policy that duplicates coverage you already have.

The federal toll-free telephone number for filing complaints is:

1-800-638-6833

TABLE OF CONTENTS

Association Group Insurance
Long-Term Care Insurance
Hospital Indemnity Insurance
Specified Disease Insurance

DO YOU NEED MORE INSURANCE?

Medicaid Recipients
Assistance for Low-Income Elderly
Federally Qualified Health Center Services

TIPS ON SHOPPING FOR HEALTH INSURANCE

LIST OF STANDARD MEDIGAP BENEFIT PLANS

CHART COMPARING STANDARD MEDIGAP BENEFIT PLANS

INSURANCE POLICY CHECK-LIST

INSURANCE COUNSELING TELEPHONE NUMBERS

STATE INSURANCE DEPARTMENTS AND AGENCIES ON AGING

DEFINITIONS OF SOME MEDICARE TERMS

Actual Charge: The amount a physician or supplier actually bills for a particular medical service or supply.

Approved Amount: The amount Medicare determines to be reasonable for a service that is covered under Part B of Medicare. It may be less than the actual charge. For physician services the approved amount is taken from a national fee schedule that assigns a dollar value to all physician services covered by Medicare.

Assignment: An arrangement whereby a physician or medical supplier agrees to accept the Medicare-approved amount as the total charge for services and supplies covered under Part B. Medicare usually pays 80% of the approved amount directly to the provider after the beneficiary meets the annual Part B deductible of $100. The beneficiary pays the other 20%.

Benefit Period: A benefit period is a way of measuring a beneficiary's use of hospital and skilled nursing facility services covered by Medicare. A benefit period begins the day the beneficiary is hospitalized and ends after the beneficiary has been out of the hospital or skilled nursing facility for 60 days in a row. If the beneficiary is hospitalized after 60 days, a new benefit period begins and most Medicare Part A benefits are renewed. There is no limit as to the number of benefit periods a beneficiary can have.

Coinsurance: The portion or percentage of Medicare's approved amounts for covered services that a beneficiary is responsible for paying.

Deductible: The amount of expense a beneficiary must first incur before Medicare begins payment for covered service's.

Excess Charge: The difference between the Medicare-approved amount for a service or supply and the actual charge, if the actual charge is more than the approved amount.

Limiting Charge: The maximum amount a physician may charge a Medicare beneficiary for a covered physician service if the physician does not accept assignment of the Medicare claim. The limit is 15% more than the fee schedule amount for nonparticipating physicians. Limiting charge information appears on Medicare's Explanation of Medicare Benefits (EOMB) form.

Medicare Carrier: An insurance organization under contract to the federal government to process Medicare Part B claims from physicians and other health care providers. The names and addresses of the carriers and areas they serve are listed in the back of The Medicare Handbook, available from any Social Security Administration office.

Medicare Hospital Insurance: This is Part A of Medicare. It helps pay for medically necessary inpatient care in a hospital, skilled nursing facility or psychiatric hospital, and for hospice and home health care.

Medicare Medical Insurance: This is Pan B of Medicare. This pan helps pay for medically necessary physician services and many other medical services and supplies not covered by Part A.

Participating Physician and Supplier: A physician or supplier who agrees to accept assignment on all Medicare claims.

SOME BASIC THINGS YOU SHOULD KNOW

If you are like most older Americans covered by Medicare, there are aspects of the federal health insurance program that you find complex and confusing. You may be uncertain about what Medicare covers and doesn't cover and how much it pays toward your medical expenses. And, like many other beneficiaries, you want to know what, if any, additional health insurance you should buy.

This booklet will give you a better understanding of your Medicare benefits, identify the gaps in your Medicare coverage, and provide tips on shopping for private health insurance to fill those gaps. As a Medicare beneficiary, you probably are already aware that Medicare does not cover all of your potential health care costs. For example, you are responsible for Medicare's deductibles and coinsurance and for charges for services not covered by Medicare.

Few people can afford to pay all of those expenses out of their own funds, so many rely on supplemental insurance to cover some of the costs. As you seek to limit your out-of-pocket costs for health care services, you will find that there are three basic ways of doing so:

1. Through the purchase of Medicare supplement insurance, which is also called "Medigap" or "MedSup" insurance;

2. By enrolling in a managed care plan, such as a health maintenance organization (HMO) that has a contract to serve Medicare beneficiaries; and,

3. By continuing coverage under an employer-provided health insurance policy, if you are eligible for such protection.

In addition, for beneficiaries who qualify, some costs may be covered by state Medicaid programs (see page 17).

Each of these ways will be discussed in subsequent sections. Special attention will be devoted to employer plans and Medigap insurance, which most Medicare beneficiaries purchase.

Insurance Counseling

Although the information in this booklet will help you to be a better informed and more careful purchaser, you may wish to obtain additional information before buying health insurance. Information about insurance to supplement Medicare is available from various senior citizen advocacy organizations and governmental agencies.

You first may want to turn to your state government for help, as all states now offer insurance counseling in one-on-one confidential sessions with trained counselors. In these sessions, you will be able to clarify insurance issues that you find confusing and receive assistance in evaluating your insurance needs. These services are provided at no charge to you.

The telephone number for your state insurance counseling office is listed in the directory of state insurance departments and agencies on aging beginning on page 27.

WHAT IS MEDICARE

Before discussing Medigap and the other types of private insurance available to supplement Medicare, it will be helpful to review your Medicare benefits and identify the payment gaps.

Medicare is a federal health insurance program for people

65 or older, people of any age with permanent kidney failure, and certain disabled people under 65. It is administered by the Health Care Financing Administration (HCFA) of the U.S. Department of Health and Human Services (HHS). The Social Security Administration, also a part of HHS, provides information about the program and handles enrollment.

Two Parts of Medicare

Medicare has two parts--Hospital Insurance (Part A) and Medical Insurance (Part B). Part A is financed through part of the Social Security (FICA) tax paid by workers and their employers. You do not have to pay a monthly premium for Medicare Pan A if you or your spouse is entitled to benefits under either the Social Security or Railroad Retirement systems or worked a sufficient period of time in federal, state, or local government employment to be insured.

If you do not qualify for premium-free Part A benefits, you may purchase the coverage if you are at least age 65 and meet certain requirements. You also may buy Part A if you are under age 65, were previously entitled to Medicare under the disability provisions and you still have the same disabling impairment but your disability benefits were terminated because of your work and earnings. If you do not qualify for premium-free Part A but had at least 30 quarters of covered employment, the Pan A monthly premium in 1994 is $184. If you had fewer than 30 quarters or no quarters of covered employment the premium is $245 per month in 1994.

Part B is optional and is offered to all beneficiaries when they become entitled to Part A. It also may be purchased by most persons age 65 or over who do not qualify for premium-free Part A coverage. The Part B premium, which most Medicare beneficiaries have deducted from their monthly Social Security check, is $41.10 per month in 1994.

You are automatically enrolled in Part B when you become entitled to Part A unless you state that you don't want it. Although you do not have to purchase Part B, it is a good buy because the federal government pays about 75 percent of the program costs.

Your Medicare card shows the coverage you have [Hospital Insurance (Part A), Medical Insurance (Part B), or both] and the date your coverage started. If you only have one part of Medicare, you can get information about getting the other part from any Social Security office.

MEDICARE HOSPITAL INSURANCE BENEFITS (PART A)

When all program requirements are met, Medicare Part A helps pay for medically necessary inpatient care in a hospital,

skilled nursing facility or psychiatric hospital, and for hospice care. In addition, Part A pays the full cost of medically necessary home health care and 80 percent of the approved cost for wheelchairs, hospital beds, and other durable medical equipment (DME) supplied under the home health care benefit.

Benefit Periods

Medicare Part A hospital and skilled nursing facility benefits are paid on the basis of benefit periods. A benefit period begins the first day you receive a Medicare-covered service in a qualified hospital. It ends when you have been out of a hospital or skilled nursing or rehabilitation facility for 60 days in a row. It also ends if you remain in a skilled nursing facility but do not receive any skilled care there for 60 days in a row.

If you enter a hospital again after 60 days, a new benefit period begins. With each new benefit period, all Part A hospital and skilled nursing facility benefits are renewed except for any lifetime reserve days or psychiatric hospital benefits that were used. There is no limit to the number of benefit periods you can have for hospital or skilled nursing facility care.

Inpatient Hospital Care

If you are hospitalized, Medicare will pay all charges for covered hospital services during the first 60 days of a benefit period except for the deductible. The Pan A deductible in 1994 is $696 per benefit period. You are responsible for the deductible. In addition to the deductible, you are responsible for a share of the daily costs if your hospital stay lasts more than 60 days. For the 61st through the 90th day, Part A pays for all covered services except for coinsurance of $174 a day in 1994. You are responsible for the coinsurance.

Under Part A, you also have a lifetime reserve of 60 days for inpatient hospital care. These lifetime reserve days may be used whenever you are in the hospital for more than 90 consecutive days. When a reserve day is used, Part A pays for all covered services except for coinsurance of $348 a day in 1994. Again, the coinsurance is your responsibility. Once used, reserve days are not renewed.

Gaps in Medicare Inpatient Hospital Coverage:

* You pay $696 deductible on first admission to hospital in each benefit period.

* You pay $174 daily coinsurance for days 61 through 90.

* No coverage beyond 90 days in any benefit period unless you have "lifetime reserve" days available and use them.

* You pay $348 daily coinsurance for each lifetime reserve day used.

* No coverage for the first 3 pints of whole blood or units of packed cells used in each year in connection with covered services. To the extent the 3-pint blood deductible is met under Part B, it does not have to be met under Part A.

* No coverage for a private hospital room, unless medically necessary, or for a private duty nurse.

* No coverage for personal convenience items, such as a telephone or television in a hospital room.

* No coverage for care that is not medically necessary or for non-emergency care in a hospital not certified by Medicare.

* No coverage for care received outside the U. S. and its territories, except under limited circumstances in Canada and Mexico.

Skilled Nursing Facility Care

A skilled nursing facility (SNF) is a special kind of facility that primarily furnishes skilled nursing and rehabilitation services. It may be a separate facility or a distinct part of another facility, such as a hospital. Medicare benefits are payable only if you require daily skilled care which, as a practical matter, can only be provided in a skilled nursing facility on an inpatient basis, and the care is provided in a facility certified by Medicare. Medicare will not pay for your stay if the services you receive are primarily personal care or custodial services, such as assistance in walking, getting in and out of bed, eating, dressing, bathing and taking medicine.

To qualify for Medicare coverage for skilled nursing facility care, you must have been in a hospital at least three consecutive days (not counting the day of discharge) before entering a skilled nursing facility. You must be admitted to the facility for the same condition for which you were treated in the hospital and the admission generally must be within 30 days of your discharge from the hospital. Your physician must certify that you need, and receive, skilled nursing or skilled rehabilitation services on a daily basis.

Medicare can help pay for up to 100 days of skilled care in a skilled nursing facility during a benefit period. All

covered services for the first 20 days of care are fully paid by Medicare. All covered services for the next 80 days are paid by Medicare except for a daily coinsurance amount. The daily coinsurance in 1994 is $87. You are responsible for the coinsurance. If you require more than 100 days of care in a benefit period, you are responsible for all charges beginning with the 101st day.

Gaps in Medicare Skilled Nursing Facility, Coverage:

* You pay $87 daily coinsurance for days 21 through 100 in each benefit period.
* No coverage beyond 100 days in a benefit period.
* No coverage for care in a nursing home, or in a SNF not certified by Medicare, or for just custodial care in a Medicare-certified SNF.
* No coverage for 3-pint blood deductible (see list of gaps under inpatient hospital care).

Home Health Care

Medicare fully covers medically necessary home health visits if you are homebound, including parttime or intermittent skilled nursing services. A Medicare-certified home health agency can also furnish the services of physical and speech therapists. Should you require speech-language pathology, physical therapy, continuing occupational therapy or intermittent skilled nursing services, are confined to your home, and are under the care of a physician, Medicare can also pay for medical supplies, necessary part-time or intermittent home health aide services, occupational therapy, and medical social services. Coverage is also provided for a portion of the cost of wheelchairs, hospital beds and other durable medical equipment (DME) provided under a plan-of-care set up and periodically reviewed by a physician.

Gaps in Medicare Home Health Coverage

* No coverage for full-time nursing care.
* No coverage for drugs or for meals delivered to your home
* You pay 20% of the Medicare-approved amount for durable medical equipment, plus charges in excess of the approved amount on unassigned claims.
* No coverage for homemaker services that are primarily to assist you in meeting personal care or housekeeping needs.

Hospice Care

Medicare beneficiaries certified as terminally ill may choose to receive hospice care rather than regular Medicare benefits for their terminal illness. Part A can pay for two 90-day hospice benefit periods, a subsequent period of 30 days, and a subsequent extension of unlimited duration. If you enroll in a Medicare-certified hospice program, you will receive medical and support services necessary for symptom management and pain relief. When these services which are most often provided in your home-are furnished by a Medicare-certified hospice program, the coverage includes: physician services, nursing care, medical appliances and supplies (including drugs for symptom management and pain relief), short-term inpatient care, counseling, therapies, home health aide and homemaker services.

You do not have to pay Medicare's deductibles and coinsurance for services and supplies furnished under the hospice benefit. You must pay only limited charges for outpatient drugs and inpatient respite care. In the event you require medical services for a condition unrelated to the terminal illness, regular Medicare benefits are available. When regular benefits are used, you are responsible for the applicable Medicare deductible and coinsurance amounts.

Gaps in Medicare Hospice Coverage:

* You pay limited charges for inpatient respite care and outpatient drugs.
* You pay deductibles and coinsurance amounts when regular Medicare benefits are used for treatment of a condition other than the terminal illness.

Psychiatric Hospital Care

Part A helps pay for up to 190 days of inpatient care in a Medicare-participating psychiatric hospital in your lifetime. Once you have used 190 days (or have used fewer than 190 days but have exhausted your inpatient hospital coverage), Part A doesn't pay for any more inpatient care in a psychiatric hospital. However, psychiatric care in general hospitals, rather than in free-standing psychiatric hospitals, is not subject to this 190-day limit. Inpatient psychiatric care in a general hospital is treated the same as other Medicare inpatient hospital care. If you are a patient in a psychiatric hospital on the first day of your entitlement to Medicare, there are additional limitations on the number of hospital days that Medicare will pay for.

Gaps in Medicare Inpatient Psychiatric Hospital Care:

* No coverage for care after you have received 190 days of such specialized treatment in your lifetime (even if you have not yet exhausted your inpatient hospital coverage).

MEDICARE MEDICAL INSURANCE (PART B) BENEFITS

Part B helps pay for medically necessary physician services no matter where you receive them--at home, in the doctor's office, in a clinic, in a nursing home, or in a hospital. It also covers related medical services and supplies, medically necessary outpatient hospital services, X-rays and laboratory tests. Coverage is also provided for certain ambulance services and the use at home of durable medical equipment, such as wheelchairs and hospital beds.

Additionally, Part B covers medically necessary physical therapy, occupational therapy, and speech-language pathology services in a doctor's office, as an outpatient, or in your home. Mental health services are covered as are mammograms and Pap smears. And if you qualify for home health care but do not have Part A, then Part B pays for all covered home health visits.

Outpatient prescription drugs generally are not covered by Part B. The exceptions include certain drugs furnished to hospice enrollees, non-self administrable drugs provided as part of a physician's services, and special drugs, such as drugs furnished during the first year after an organ transplantation, erythropoetin for home dialysis patients, and certain oral cancer drugs.

When you use your Part B benefits, you will be required to pay the first $100 (the annual deductible) each calendar year. The deductible must represent charges for services and supplies covered by Medicare. It also must be based on the Medicare approved amounts, not the actual charges billed by your physician or medical supplier.

After you meet the deductible, Part B generally pays 80 percent of the Medicare-approved amount for covered services you receive the rest of the year. You are responsible for the other 20 percent. If you require home health services, you do not have to pay a deductible or coinsurance. You do, however, have to pay 20 percent of the Medicare-approved amount for any durable medical equipment! supplied under the Medicare home health benefit.

You may also have other out-of-pocket costs under Part B if your physician or medical supplier does not accept assignment of your Medicare claim and charges more than

Medicare's approved amount. The difference to be paid is called the "excess charge" or "balance billing." You should be aware, however, that there are certain charge limitations mandated by federal law (discussed below) and that some states also limit physician charges.

Medicare-Approved Amount

The Medicare-approved amount for physician services covered by Part B is based on a national fee schedule. The schedule assigns a dollar value to each physician service based on work, practice costs and malpractice insurance costs. Under this payment system, each time you go to a physician for a service covered by Medicare, the amount Medicare will recognize for that service will be taken from the national fee schedule. Medicare generally pays 80 percent of that amount.

Because you cannot tell in advance whether the approved amount and the actual charge for covered services and supplies will be the same, always ask your physicians and medical suppliers whether they accept assignment of Medicare claims.

Accepting Assignment

Those who take assignment on a Medicare claim agree to accept the Medicare-approved amount as payment in full. They are paid directly by Medicare, except for the deductible and coinsurance amounts that you must pay.

For example, for your first annual visit, if you go to a participating physician, or if you go to a nonparticipating physician who accepts assignment, and the Medicare-approved amount for the service you receive is $200, you will be billed $120: $100 for the annual deductible plus 20 percent of the remaining $100, or $20. Medicare would pay the other $80. Having met the deductible for the year, the next time you used Part B services furnished by a physician or medical supplier who accepts assignment, you would be responsible for only 20 percent of the Medicare-approved amount.

Physicians and suppliers who sign Medicare participation agreements accept assignment on all Medicare claims. Their names and addresses are listed in The Medicare Participating Physician/Supplier Directory, which is distributed to senior citizen organizations, all Social Security and Railroad Retirement Board offices, hospitals, and all state and area offices of the Administration on Aging.

It also is available free by writing or calling the insurance company that processes Medicare Pan B claims for your area. Called a Medicare "carrier," the company's name, address and telephone number are listed in the back of The Medicare Handbook, available from any Social Security office.

Even if your physician or supplier does not participate in Medicare, ask before receiving any services or supplies whether he or she will accept assignment of your Medicare claim. Many physicians and suppliers accept assignment on a case-by-case basis. If your physician or supplier will not accept assignment, you are responsible for paying all permissible charges.

Medicare will then reimburse you its share of the approved amount for the services or supplies you received. Regardless of whether your physician or supplier accepts assignment, they are required to file your Medicare claim for you.

In certain situations nonparticipating providers of services are required by law to accept assignment. For instance, all physicians and qualified laboratories must accept assignment for Medicare-covered clinical diagnostic laboratory tests. Physicians also must accept assignment for covered services provided to beneficiaries with incomes low enough to qualify for Medicaid payment of their Medicare cost-sharing requirements (see page 18).

Physician Charge Limits

While physicians who do not accept assignment of a Medicare claim can charge more than physicians who do, there is a limit as to the amount they can charge you for services covered by Medicare. Under the law, they are not permitted to charge more than 115 percent of the Medicare-approved amount for the service. Physicians who knowingly, willfully, and repeatedly charge more than the legal limit are subject to sanctions. If you think you have been overcharged, or you want to know what the limiting charge is for a particular service, contact the Medicare carrier for your area. Limiting charge information also appears on the Explanation of Medicare Benefits (EOMB) form that you generally receive from the Medicare carrier when you go to a physician for a Medicare-covered service. You do not have to pay charges that exceed the legal limit.

If you think your physician has exceeded the charge limit, you should contact the physician and ask for a reduction in the charge, or a refund, if you have paid more than the charge limit. If you cannot resolve the issue with the physician, you can call your Medicare carrier and ask for assistance.

More Charge Limits

Another federal law requires physicians who do not accept assignment for elective surgery to give you a written estimate of your costs before the surgery if the total charge will be $500 or more. If the physician did not give you a written

estimate, you are entitled to a refund of any amount you paid in excess of the Medicare-approved amount. Any nonparticipating physician who provides you with services that he or she knows or has reason to believe Medicare will determine to be medically unnecessary and thus will not pay for, is required to so notify you in writing before performing the service. If written notice is not given, and you did not know that Medicare would not pay, you cannot be held liable to pay for that service. However, if you did receive written notice and signed an agreement to pay for the service, you will be held liable to pay.

Gaps in Medicare Coverage for Doctors and Medical Suppliers

* You pay $100 annual deductible.
* Generally, you pay 20% coinsurance.
* You pay legally permissible charges in excess of the Medicare-approved amount for unassigned claims (see page 6).
* You pay 50% of approved charges for most outpatient mental health treatment.
* You pay all charges in excess of Medicare's maximum yearly limit of $900 for independent physical or occupational therapists.
* No coverage for most services that are not reasonable and necessary for the diagnosis or treatment of an illness or injury.
* No coverage for most self-administerable prescription drugs or immunizations, except for pneumococcal, influenza and hepatitis B vaccinations.
* No coverage for routine physicals and other screening services, except for mammograms and Pap smears.
* Generally, no coverage for dental care or dentures.
* No coverage for acupuncture treatment.
* No coverage for hearing aids or routine hearing loss examinations.
* No coverage for care received outside the United States and its territories, except under limited circumstances in Canada and Mexico.
* No coverage for routine foot care except when a medical condition affecting the lower limbs (such as diabetes) requires care by a medical professional.
* No coverage for services of naturopaths, Christian Science

practitioners, immediate relatives, or charges imposed by members of your household.

* No coverage for the first 3 pints of whole blood or units of packed cells used in each year in connection with covered services. To the extent the 3-pint blood deductible is met under Part A, it does not have to be met under Part B.

* No coverage for routine eye examinations or eyeglasses, except prosthetic lenses, if needed, after cataract surgery.

Medicare Benefit Charts

The charts on pages 8 and 9 describe Medicare benefits only. The "You Pay" column itemizes expenses you are responsible for and must pay out of your own pocket or through the purchase of some type of private insurance as described in this booklet.

[Graphic Omitted]

[Graphic Omitted]

TYPES OF PRIVATE HEALTH INSURANCE

Whether you need health insurance in addition to Medicare is a decision that only you can make. As you saw from the review of your Medicare benefits, Medicare does not offer complete health insurance protection. Private health insurance can help fill many of the gaps. But before buying insurance to supplement your Medicare benefits, make sure you need it. Not everyone does (see page 17). In general it is advisable to buy the additional protection that private health insurance can provide. If you decide to buy supplemental insurance, shop carefully and buy a policy that offers the kind of additional help you think you need most.

A variety of private insurance policies is available to help pay for medical expenses, services and supplies that Medicare covers only partly or not at all. The basic types of policies include:

1. Medigap, which pays some of the amounts that Medicare does not pay for covered services and may pay for certain services not covered by Medicare.

2. Managed care plans [these include health maintenance organizations (HMOs) and competitive medical plans (CMPs)], from which you purchase health care services directly for a fixed monthly premium;

3. Continuation or conversion of an employer-provided or other policy you have when you reach 65;

4. Nursing home or long-term care policies, which pay cash amounts for each day of covered nursing home or at-home care;

5. Hospital indemnity policies, which pay only when you need treatment for the insured disease.

6. Specified disease policies, which pay only when you need treatment for the insured disease.

Medigap

Medigap insurance is regulated by federal and state law and must be clearly identified as Medicare supplement insurance. Unlike other types of health insurance, it is designed specifically to supplement Medicare's benefits by filling in some of the gaps in Medicare coverage.

To make it easier for consumers to comparison shop for Medigap insurance, nearly all states, U.S. territories, and the District of Columbia have adopted regulations that limit the number of different Medigap policies that can be sold in any of those jurisdictions to no more than 10 standard benefit plans. The plans, which have letter designations ranging from "A" through "J", were developed by the National Association of Insurance Commissioners and incorporated into state and federal laws. See pages 22-24 for descriptions and comparisons of the 10 plans.

Plan A of the 10 standard Medigap plans is the "basic" benefit package. Each of the other nine plans includes the basic package plus a different combination of benefits. The plans cover specific expenses either not covered or not fully covered by Medicare, with "A" being the most basic policy and "J" the most comprehensive. Insurers are not permitted to change the combination of benefits in any of the plans or to change the letter designations.

Each state must allow the sale of Plan A, and all Medigap insurers must make Plan A available. Insurers are not required to offer any of the other nine plans, but most offer several plans, and some offer all 10. Insurers can independently decide which of the nine optional plans they will sell as long as the plans they select have been approved for sale in the state in which they are to be offered.

Some states have limited the number of plans available in the state. Delaware does not permit Plans C, F, G and H to be sold in the state. Pennsylvania and Vermont do not permit the sale of Plans F, G and I. (As this guide was being prepared for printing, however, Pennsylvania was considering a proposal that would permit the sale of all 10 plans.)

Residents of Minnesota, Massachusetts and Wisconsin will find that their Medigap plans are different than those sold in other states. This is because those states had alternative Medigap standardization programs in effect before the federal legislation standardizing Medigap was enacted. Therefore, they were not required to change their benefit plans. If you live in Minnesota, Massachusetts or Wisconsin, you should contact the state insurance department to find out what Medigap coverage is available to you.

The only areas where standardization is not in effect are Guam, American Samoa, and the Commonwealth of the Northern Mariana Islands.

Comparing Medigap Plans: To make it easier for consumers to compare plans and premiums, the same format, language, and definitions must be used in describing the benefits of each of the plans. A uniform chart and outline of coverage also must be used by the insurer to summarize those benefits for you.

As you shop for a Medigap policy, keep in mind that each company's products are alike, so they are competing on service, reliability and price. Compare benefits and premiums and be satisfied that the insurer is reputable before buying. And in selecting the benefits that meet your needs, remember that Medicare pays only for services it determines to be medically necessary and only the amount it determines to be reasonable.

Medigap policies pay most, if not all, Medicare coinsurance amounts and may provide coverage for Medicare's deductibles. Some of the 10 standard plans pay for services not covered by Medicare and some pay for charges in excess of Medicare's approved amount. Look for the plan that best meets your needs.

All standard Medigap plans must have a loss ratio of at least 65 percent for individual policies and 75 percent for group policies. This means that on average either 65 cents or 75 cents of each premium dollar goes for benefits.

Unlike some types of health coverage that restrict where and from whom you can receive care, Medigap policies generally pay the same supplemental benefits regardless of your choice of health care provider. If Medicare pays for a service, wherever provided, the standard Medigap policy must pay its regular share of benefits. The only exception is Medicare SELECT insurance, discussed on page 13.

Besides the standardized benefit plans, federal law permits states to allow an insurer to add "new and innovative benefits" to a standardized plan that otherwise complies with applicable standards. Any such new or innovative benefits must be cost-effective, not otherwise available in the marketplace, and offered in a manner that is consistent with the goal of simplification. Check with your state insurance department to find out whether such benefits are available in your state.

Your Right To Medigap Coverage: If you are 65 or older, state and federal laws guarantee that for a period of 6 months from the date you first enroll in Medicare Part B, you have a right to buy the Medigap policy of your choice regardless of your health conditions.

During this 6-month open enrollment period, you have the choice of any of the different Medigap policies sold by any insurer doing Medigap business in your state. The company cannot deny or condition the issuance or effectiveness, or discriminate in the pricing of a policy, because of your medical history, health status, or claims experience. The company can, however, impose the same preexisting condition restrictions (see page 19) that it applies to Medigap policies sold outside the open enrollment period.

Many individuals are enrolled automatically in Pan B as soon as they rum 65, or they sign up during an initial 7-month enrollment period that begins 3 months before they turn 65. If you are in this group, your Part B coverage generally starts in the month you turn 65 or shortly thereafter, depending on when you applied for Part B. Your Medigap open enrollment period starts as soon as your Part B coverage starts.

Others may delay their enrollment in Part B. For example, if after turning 65, you continue to work and choose to be continuously covered by an employer insurance plan, or if you are continuously covered under a spouse's employment related insurance instead of Medicare Part B, you will have a special 7-month enrollment period for Part B. It begins with the month your or your spouse's work ends or when you are no longer covered under the employer plan, whichever comes first. Your 6-month Medigap open enrollment period starts when your Part B coverage begins.

If you are covered under an employer group health plan when you become eligible for Part B at age 65, carefully consider your options. Once you enroll in Part B the 6-month Medigap open enrollment period starts and cannot be extended or repeated.

If you cannot defer Part B enrollment as described above, but are 65 or older and are eligible for Part B but never signed up for it, you may buy Part B during Medicare's annual general enrollment period. It runs from January 1 through March 31. If you sign-up during an open enrollment period, both your Part B coverage and Medigap open enrollment period begin the following July 1.

Your Medicare card shows the effective dates for your Part A and/or Part B coverage. To figure whether you are in your Medigap open enrollment period, add 6 months to the effective date of your Part B coverage. If the date is in the future and you are at least 65, you are eligible for open enrollment. If the date is in the past, you are not eligible.

If you are under age 65, disabled, and enrolled in Medicare Part B, you are not eligible for Medigap open enrollment unless your state requires open enrollment for persons under 65 who qualify for Medicare because of a disability. Moreover, unless your state requires otherwise, you will not be eligible for the Medigap open enrollment period when you turn 65 because you will not be enrolling in Part B for the first time.

Older Medigap Policies: Current federal requirements generally do not apply to Medigap policies in force in a state before the requirements which took effect in that state in 1992. Depending on which state you live in, you will not have to switch to one of the 10 standard plans if you have an older policy that is guaranteed renewable.

Some states, however, have specific requirements that affect existing non-standard policies. For example, some states require or permit insurers to convert older policies to the standardized plans. Check with your state insurance department to find out what state-specific requirements are in force. Even if you are not required to convert an older policy, you may want to consider switching to one of the standardized Medigap plans if it is to your advantage and an insurer is willing to sell you one.

If you do switch, you will not be allowed to go back to the old policy. Before switching, compare benefits and premiums, and determine if there are waiting periods for any of the benefits in the new policy. Some of the older policies may provide superior coverage, especially for prescription drugs and extended skilled nursing care.

If you had the old Medigap policy at least 6 months and you decide to switch, the new policy is not permitted to impose a waiting period for a preexisting condition if you satisfied a waiting period for a similar benefit under your old policy. If, however, a benefit is included in the new policy that was not in the old policy, a waiting period of up to 6 months unless prohibited by your state may be applied to that particular benefit.

Because it is unlawful for anyone to sell you insurance that duplicates coverage you already have, and because you do not need more than one Medigap policy, you must sign a statement that you intend to replace your current policy and will not keep both policies. Do not cancel the old policy until the new one is in force and you have decided to keep it (see "Free Look," page 20).

Medigap Insurance Defined: Under state and federal laws, Medigap policies are policies designed to supplement your Medicare benefits. They must provide specific benefits that pay, within limits, some or all of the costs of services either not covered or not fully covered by Medicare. The definition does not include all insurance products that may help you cover

out-of-pocket costs. For example, neither a health plan offered by a company for current or former employees, nor by a labor organization for current or former members, is Medigap insurance. Nor are limited benefit plans such as hospital indemnity insurance. They do not qualify because they are not required. to provide the same benefits that the 10 standard Medigap plans must provide.

Similarly, coverage provided to individuals enrolled in managed care plans, such as health maintenance organizations (HMOs) under contracts or agreements with the federal government, does not meet the definition of Medigap insurance even though some of the coverage may be similar. On the other hand, an HMO's supplemental insurance product sold to an individual Medicare beneficiary who is not enrolled under either an employer plan or a federal contract or agreement, does qualify as Medigap insurance.

Medicare SELECT. A Medicare supplement health insurance product called "Medicare SELECT" is permitted to be sold in Alabama, Arizona, California, Florida, Illinois, Indiana, Kentucky, Massachusetts, Minnesota, Missouri, Noah Dakota, Ohio, Texas, Washington and Wisconsin. Medicare SELECT, which may be offered in the designated states by insurance companies and HMOs, is the same as standard Medigap insurance in nearly all respects. If you buy a Medicare SELECT policy, you are buying one of the 10 standard Medigap plans (see page 22).

The only difference between Medicare SELECT and standard Medigap insurance is that Medicare SELECT policies will only pay or provide full supplemental benefits if covered services are obtained through specified health care professionals and facilities. Medicare SELECT policies are expected to have lower premiums because of this limitation. The specified health care professionals and facilities, called "preferred providers," are selected by the insurance company or HMO. Each issuer of a Medicare SELECT policy makes arrangements with its own network of preferred providers.

If you have a Medicare SELECT policy, each time you receive covered services from a preferred provider, Medicare will pay its share of the approved charges and the insurer will pay or provide the full supplemental benefits provided for in the policy. Medicare SELECT insurers must also pay supplemental benefits for emergency health care furnished by providers outside the preferred provider network. In general, Medicare SELECT policies deny payment or pay less than the full benefit if you go outside the network for non-emergency services. Medicare, however, will still pay its share of approved charges if the services you receive outside the network are services covered by Medicare.

Medicare SELECT will be evaluated through 1994 to determine if it should be continued and made available throughout the nation. Companies selling Medicare SELECT policies are required to provide for the continuation of coverage if the policies are discontinued. If the program is

not extended, Medicare SELECT policyholders will have the option to purchase any standard Medigap policy that the insurance company or HMO offers, if in fact it issues Medigap insurance other than Medicare SELECT. To the extent possible, the replacement policy would have to provide similar benefits.

Carrier Filing of Medigap Claims. Under certain circumstances, when you receive medical services covered by both Medicare and your Medigap insurance, you may not have to file a separate claim with your Medigap insurer in order to have payment made directly to your physician or medical supplier. By law, the Medicare carrier that processes Medicare claims for your area must send your claim to the Medigap insurer for payment when the following three conditions are met for a Medicare Part B claim:

1. Your physician or supplier must have signed a participation agreement with Medicare to accept assignment of Medicare claims for all patients who are Medicare beneficiaries:

2. Your policy must be a Medigap policy: and

3. You must instruct your physician to indicate on the Medicare claim form that you wish payment of Medigap benefits to be made to the participating physician or supplier. Your physician will put your Medigap policy number on the Medicare claim form.

When these conditions are met, the Medicare carrier will process the Medicare claim, send the claim to the Medigap insurer and generally send you an Explanation of Medicare Benefits (EOMB). Your Medigap insurer will pay benefits directly to your physician or medical supplier and send you a notice that they have done so. If the insurer refuses to pay the physician directly when these three conditions are met, you should report this to your state insurance department. For more information on Medigap claim filing by the carrier, contact the Medicare carrier. Look in The Medicare Handbook for the name and telephone number of the carrier for your area.

Managed Care Plans That Contract With Medicare

Managed care plans, also called coordinated care and prepaid plans, include health maintenance organizations (HMOs) and competitive medical plans (CMPs). They might be thought of as a combination insurance company and doctor/hospital. Like an insurance company, they cover health care costs in return for a monthly premium, and like a doctor or hospital, they arrange for health care.

As a Medicare beneficiary, you can choose how you will receive hospital, doctor, and other health care services covered by Medicare. You can receive them either through the traditional fee-for-service delivery system or through a

managed care plan that has a contract with Medicare. If you choose fee-for-service care, you should consider purchasing Medigap insurance.

If you enroll in a Medicare-contracting HMO or CMP, you will not need a Medigap policy. In fact, insurers are prohibited from issuing you one because it would duplicate your HMO or CMP benefits. If you have a Medigap policy and decide to enroll in a plan, you will be asked to provide an assurance that you will give up the Medigap policy.

Should you enroll in a managed care plan and later disenroll and return to fee-for-service care, you likely will be able to buy a Medigap policy, but you may not get the policy; of your choice, especially if you have a health problem. On the other hand, both disabled and aged Medicare beneficiaries generally may enroll in a Medicare-contracting HMO or CMP without regard to any health problems they may have. For this and other reasons, managed care can be an attractive option for many beneficiaries.

A managed care plan generally arranges with a network of health care providers (doctors, hospitals, skilled nursing facilities, etc.) to offer comprehensive, coordinated medical services to plan members on a prepaid basis. If you enroll in an HMO or CMP with a Medicare contract; services usually must be obtained from the professionals and facilities that are part of the plan, except in a medical emergency.

The plan must provide or arrange for all Part A and B services (if you are covered under both parts of Medicare). Some plans also provide benefits beyond what Medicare covers, such as preventive care, prescription drugs, dental care, hearing aids and eyeglasses.

Medicare makes a monthly payment to the plan to cover Medicare's share of the cost of the services you receive. Additionally, most plans charge enrollees a monthly premium and nominal copayments as services are used. Usually there are no other charges--no matter how many times you visit the doctor, are hospitalized, or use other covered services. Medicare's deductibles and coinsurance do not apply to beneficiaries enrolled in plans with Medicare contracts.

If you enroll in an HMO or a CMP that has a "risk" contract with Medicare, Medicare will not pay for non-emergency services you receive from providers outside of the HMO or CMP. That is, you must receive all your health care benefits (except in an emergency) from the HMO or CMP in order to be covered.

If you enroll in a plan that has a "cost" contract with Medicare, you can receive covered services either through the plan or outside the plan. If you go outside the plan for non-emergency services, Medicare will still pay but the plan will not. You would be responsible for the same charges that you would be liable for if you were only covered by Medicare, but you would no longer have a Medigap policy to cover those

charges.

You are eligible to enroll in a managed care plan with a Medicare contract if you live in the plan's service area, are enrolled in Medicare Part B, do not have permanent kidney failure, and have not elected the Medicare hospice benefit. The plan must enroll Medicare beneficiaries in the order of application, without health screening, during at least one open enrollment period each year.

Before joining a plan, be sure to read the plan's membership materials carefully to learn your rights and the nature and extent of your coverage. If you live in an area that is served by more than one managed care plan, compare benefits, costs and other features to determine which plan meets your needs. Also, determine which type of contract the plan has with Medicare.

Group Insurance

There are two principal sources of group insurance: employers and voluntary associations.

Employer Group Insurance for Retirees. Many people have private insurance when they reach age 65 that often is purchased through their or their spouse's current employer or union membership. If you have such coverage, find out if it can be continued when you or your spouse retires. Check the price and the benefits, including benefits for your spouse.

Group health insurance that is continued after retirement usually has the advantage of having no waiting periods or exclusions for preexisting conditions, and the coverage is usually based on group premium rates, which may be lower than the premium rates for individually purchased policies. One note of caution, however. If you have a spouse under 65 who was covered under the prior policy, make sure you know what effect your continued coverage will have on his or her insurance protection.

Furthermore, since employer group insurance policies do not have to comply with the federal minimum benefit standards for Medigap policies, it is important to determine what coverage your specific retirement policy provides. While the policy may not provide the same benefits as a Medigap policy, it may offer other benefits such as prescription drug coverage and routine dental care.

Special Rules for Working People Age 65 or Over. If you are 65 or over and you or your spouse works, Medicare may be secondary payer to any employer group health plan (EGHP) coverage you have. This means that the employer plan pays first on your hospital and medical bills. If the employer plan does not pay all of your expenses, Medicare may pay secondary benefits for Medicare-covered services to supplement the amount

paid by the employer plan.

Employers who have 20 or more employees are required to offer the same health benefits, under the same conditions, to employees age 65 or over and to employees' spouses who are 65 or over, that they offer to younger employees and spouses. EGHP coverage of employers of 20 or more employees is primary to Medicare.

You may accept or reject coverage under the EGHP. If you accept the employer plan, it will be your primary payer. If you reject the plan, Medicare will be the primary payer for Medicare-covered health services that you receive. If you reject the employer plan, you can buy supplemental insurance but an employer cannot provide you with a plan that pays supplemental benefits for Medicare-covered services or subsidize such coverage. An employer may, however, offer a plan that pays for health care services not covered by Medicare, such as hearing aids, routine dental care, and physical checkups.

Special Rules for Certain Disabled Medicare Beneficiaries. Medicare is also secondary for certain people under age 65 who are entitled to Medicare based on disability (other than those with permanent kidney failure) and who have large group health plan (LGHP) coverage. An LGHP is a plan of, or contributed to by, an employer or employee organization that covers the employees of at least one employer with 100 or more employees.

This requirement applies to those who have LGHP coverage as an employee, employer, self-employed person, business associate of an employer, or a family member of any of these people. An LGHP must not treat any of these people differently because they are disabled and have Medicare.

The term "employee" here includes both those who are actively working despite their disability (such as disabled Medicare beneficiaries engaged in a trial work period) and those who are not actively working, but whom the employer treats as employees. Medicare determines whether an individual is considered to be an employee.

Disabled persons also have the option of accepting or rejecting LGHP coverage. If they reject the plan, Medicare becomes their primary payer and the employer may not provide or subsidize supplemental coverage, except for items and services not covered by Medicare.

Special Rules for Medicare Beneficiaries with Permanent Kidney Failure. Medicare is secondary payer to EGHPs for 18 months for beneficiaries who have Medicare solely because of permanent kidney failure. This requirement applies only to those with permanent kidney failure, whether they have their own coverage under an EGHP or are covered under an EGHP as dependents. EGHPs are primary payers during this period without regard to the size of the EGHP or the number of employees. The 18-month period begins with the earlier of:

* The first month in which the person becomes entitled to Medicare Part A or

* The first month in which an individual would have been entitled to Part A if he had filed an application for Medicare benefits.

However, EGHPs may be primary for an additional 3 months, or a total of up to 21 months: the first three months of dialysis (a period during which an individual generally is not eligible for Medicare benefits) plus the first 18 months of Medicare eligibility or entitlement. After the period of up to 21 months expires, Medicare is primary payer for entitled individuals and the EGHP is secondary.

The Health Care Financing Administration pamphlet entitled Medicare Coverage of Kidney Dialysis and Kidney Transplant Services contains more information about Medicare and kidney disease. You can get a free copy from the Social Security Administration or the Consumer Information Center, Department 59, Pueblo, CO 81009.

Association Group Insurance. Many organizations, other than employers, offer group health insurance coverage to their members. Just because you are buying through a group does not mean that you are getting a low rate. Group insurance can be as expensive as or more costly than comparable coverage under individual policies. Be sure you understand the benefits included and then compare prices. Association group Medigap insurance must comply with the same rules that apply to other Medigap policies.

The following types of coverage are generally limited in scope and are not substitutes for Medigap insurance or managed care plans.

Long-Term Care Insurance

Nursing home and long-term care insurance are available to cover custodial care in a nursing home. Some of these policies also cover care in the home, and others are available to pay for care in a skilled nursing facility (SNF) after your Medicare benefits run out (see page 3 for an explanation of the Medicare benefit for skilled nursing facility care).

If you are in the market for nursing home or longterm care insurance, be sure you know which types of nursing homes and services are covered by the different policies available. And if you buy a policy, make sure it does not duplicate skilled nursing facility (SNF) coverage provided by any Medigap policy, managed care plan, or other coverage you have.

It is important to remember that custodial care (the type of care most persons in nursing homes require) is not covered

by Medicare or most Medigap policies. The only care of this nature that Medicare covers is skilled nursing care or skilled rehabilitation care that is provided in a Medicare-certified skilled nursing facility.

For more information about long-term care insurance, request a copy of A Shopper's Guide to Long-Term Care Insurance from either your state insurance department or the National Association of Insurance Commissioners, 120 W. 12th Street, Suite 1100, Kansas City, MO 64 105-1925. You may also obtain a copy of the Guide to Choosing a Nursing Home by writing to Medicare Publications, Health Care Financing Administration, 6325 Security Boulevard, Baltimore, MD 21207.

Hospital Indemnity Insurance

Hospital indemnity coverage is insurance that pays a fixed cash amount for each day you are hospitalized up to a designated number of days. Some coverage may have added benefits such as surgical benefits or skilled nursing home confinement benefits. Some policies have a maximum number of days or a maximum payment amount. Generally, a hospital indemnity policy will pay the specified daily amount regardless of any other health insurance coverage you have, but other group health insurance may coordinate benefits with hospital confinement indemnity insurance sold on a group basis.

Specified Disease Insurance

Specified disease insurance, which is not available in some states, provides benefits for only a single disease, such as cancer, or a group of specified diseases. The value of such coverage depends on the chance you will get the specific disease or diseases covered. Benefits are usually limited to payment of a fixed amount for each type of treatment. Benefits are not designed to fill gaps in Medicare coverage.

DO YOU NEED MORE INSURANCE?

Before buying insurance to supplement Medicare, ask yourself whether you need private health insurance in addition to Medicare. Not everyone does.

Medicaid Recipients

Low-income people who are eligible for Medicaid usually do not need additional insurance. They also qualify for certain health care benefits beyond those covered by Medicare, such as long-term nursing home care. If you become eligible for

Medicaid, and you have Medigap insurance purchased on or after November 5, 1991, you can request that the Medigap benefits and premiums be suspended for up to two years while you are covered by Medicaid. Should you become ineligible for Medicaid benefits during the two years, your Medigap policy will be reinstated if you give proper notice and begin paying premiums again. You do not, however, have to suspend your Medigap policy, and suspension is not always to a Medicaid recipient's advantage. You may want to discuss your options with your state Medicaid representatives.

Qualified Medicare Beneficiary Program: Assistance for Low-Income Elderly

Limited financial assistance is available through Medicaid for paying Medicare premiums, deductibles, and coinsurance amounts for certain low-income elderly and disabled beneficiaries. If your annual income is at or below the national poverty level and your cash and savings are very limited, you may qualify for state assistance in paying Medicare's monthly premiums, deductibles and coinsurance. This is called the "Qualified Medicare Beneficiary" (QMB) program.

To have qualified in 1993, your income could not have been more than $601 per month for one person or $806 per month for a couple, except in Alaska and Hawaii. In Alaska the income limits were $745 per month for one person and $1,002 per month for a couple. In Hawaii they were $690 per month for one person and $925 per month for a couple. The limits for 1994 will be announced in February 1994. Financial resources such as bank accounts, stocks, and bonds cannot exceed $4,000 for one person or $6,000 for a couple.

Financial assistance also is available for Medicare beneficiaries under the "Specified Low-Income Medicare Beneficiary" (SLMB) program. This program is for beneficiaries whose incomes exceed the poverty level by not more than 10 percent and who meet certain resource limitations. To have qualified for this program in 1993, your income could not have been more than $659 a month for one person or $884 a month for a couple, except in Alaska and Hawaii. In Alaska the income limits were $818 per month for one person and $1,100 per month for a couple. In Hawaii they were $758 per month for one person and $1,016 per month for a couple. Individuals in this category are eligible only for Medicaid payment of their Medicare Pan B premium, which is $41.10 per month in 1994. If you think you qualify for state assistance in paying your Medicare expenses under either of these two programs, contact your state or local social service agency. If you cannot find a telephone number for the state agency, call 1-800638-6833 for assistance.

Federally Qualified Health Center

Medicare pays for some health services, including preventive care, when provided by a federally qualified health center (FQHC). These facilities are typically community health centers, migrant health centers and health centers for the homeless. They are generally located in inner-city and rural areas. The services covered by Medicare at FQHCs include routine physical examinations, screenings, and diagnostic tests for the detection of vision and hearing problems and other medical conditions, and the administration of certain vaccines for immunization against influenza and other diseases.

When those services are furnished at a FQHC, the $100 annual Part B deductible does not apply (see page 5). However, if other services are provided, such as X-rays or screening mammograms, the FQHC may bill the Medicare carrier. In that case, you would be responsible for any unmet portion of the Pan B annual deductible of $.100. As for the 20 percent Part B coinsurance, it is applicable for all FQHC services but Public Health Service guidelines allow the FQHC to waive it in some instances. Any Medicare beneficiary may seek services at an FQHC.

To find out whether one of these centers serves your area, call 1-800-638-6833.

TIPS ON SHOPPING FOR HEALTH INSURANCE

Shop Carefully Before You Buy. Policies differ as to coverage and cost, and companies differ as to service. Contact different companies and compare the premiums before you buy.

Don't Buy More Policies Than You Need. Duplicate coverage is expensive and unnecessary. A single comprehensive policy is better than several policies with overlapping or duplicate coverage. Federal law prohibits issuing duplicative coverage to Medicare beneficiaries even if both policies would pay full benefits. The law generally prohibits the sale of a Medicare supplement policy to a person who has Medicaid or another health insurance policy that provides coverage for any of the same benefits.

Similarly, the sale of any other kind of health insurance policy is generally prohibited if it duplicates coverage you already have. When you buy a replacement Medigap policy, the insurer is required to obtain your written statement that you intend to cancel the first policy after the new policy becomes effective. If you are on Medicaid, insurers may not sell you a Medigap policy unless the state pays the premium. Anyone who sells you a policy in violation of these anti-duplication provisions is subject to criminal and/or civil penalties under federal law. Call 1-800-638-6833 to report suspected violations.

Consider Your Alternatives. Depending on your health care needs and finances, you may want to consider continuing the group coverage you have at work; joining an HMO, CMP or other managed care plan; buying a Medigap policy; or buying a longterm care insurance policy.

Check For Preexisting Condition Exclusions. In evaluating a policy, you should determine whether it limits or excludes coverage for existing health conditions. Many policies do not cover health problems that you have at the time of purchase. Preexisting conditions are generally health problems you went to see a physician about within the 6 months before the date the policy went into effect.

Don't be misled by the phrase "no medical examination required." If you have had a health problem, the insurer might not cover you immediately for expenses connected with that problem. Medigap policies, however, are required to cover preexisting conditions after the policy has been in effect for 6 months.

Beware of Replacing Existing Coverage. Be careful when buying a replacement Medigap policy. Make sure you have a good reason for switching from one policy to another--you should only switch for different benefits, better service, or a more affordable price. On the other hand, don't keep inadequate policies simply because you have had them a long time. If you decide to replace your Medigap policy, you must be given credit for the time spent under the old policy in determining when any preexisting conditions restrictions apply under the new policy. You must also sign a statement that you intend to terminate the policy to be replaced. Do not cancel the first policy until you are sure that you want to keep the new policy.

Prohibited Marketing Practices. It is unlawful for a company or agent to use high pressure tactics to force or frighten you into buying a Medigap policy, or to make fraudulent or misleading comparisons to get you to switch from one company or policy to another. Deceptive "cold lead" advertising also is prohibited. This lactic involves mailings to identify individuals who might be interested in buying insurance. If you fill in and return the card enclosed in the mailing, the card may be sold to an insurance agent who will try to sell you a policy.

Be Aware of Maximum Benefits. Most policies have some type of limit on benefits. They may restrict either the dollar amount that will be paid for treatment of a condition or the number of days of care for which payment will be made. Some insurance policies (but not Medigap policies) pay less than the Medicare-approved amounts for hospital outpatient medical services and for services provided in a doctor's office. Others do not pay anything toward the cost of those services.

Check Your Right to Renew. States now require that Medigap policies be guaranteed renewable. This means that the company can refuse to renew your policy only if you do not pay the

premiums or you made material misrepresentations on the application. Beware of older policies that let the company refuse to renew on an individual basis. These policies provide the least permanent coverage.

Even though your policy may be guaranteed renewable. the company may adjust the premiums from time to time. Some policies have premiums which increase as you grow older.

Be A ware That Policies to Supplement Medicare Are Neither Sold Nor Serviced by the State or Federal Governments. State insurance departments approve policies sold by insurance companies but approval only means the company and policy meet requirements of state law. Do not believe statements that insurance to supplement Medicare is a government-sponsored program.

If anyone tells you that they are from the government and later tries to sell you an insurance policy, report that person to your state insurance department or federal authorities. This type of misrepresentation is a violation of federal and state law. It is also unlawful for a company or agent to claim that a policy has been approved for sale in any state in which it has not received state approval, or to use fraudulent means to gain approval.

Know With Whom You're Dealing. A company must meet certain qualifications to do business in your state. You should check with your state insurance department to make sure that any company you are considering is licensed in your state. This is for your protection. Agents also must be licensed by your state and may be required by the state to carry proof of licensure showing their name and the company they represent. If the agent cannot verify that he or she is licensed, do not buy from that person. A business card is not a license.

Keep Agents' and/or Companies' Names, Addresses and Telephone Numbers. Write down the agents' and/or companies' names, addresses and telephone numbers or ask for a business card that provides all that information.

Take Your Time. Do not be pressured into buying a policy. Principled salespeople will not rush you. If you are not certain whether a program is worthy, ask the salesperson to explain it to a friend. Keep in mind, however, that there is a limited time period in which new Medicare Part B enrollees can buy the Medigap policy of their choice without conditions being imposed (see page 11). Once this open enrollment period elapses, you may be limited as to the Medigap policies available to you, especially if you have a preexisting health condition.

If You Decide To Buy, Complete the Application Carefully. Do not believe an insurance agent who tells you that your medical history on an application is not important. Some companies ask for detailed medical information. If you leave out any of the medical information requested, coverage could be

refused for a period of time for any medical condition you neglected to mention. The company also could deny a claim for treatment of an undisclosed condition and/or cancel your policy.

Look For an Outline of Coverage. You must be given a clearly worded summary of the policy... READ IT CAREFULLY.

Do Not Pay Cash. Pay by check, money order or bank draft made payable to the insurance company, not to the agent or anyone else. Get a receipt with the insurance company's name, address and telephone number for your records.

Policy Delivery or Refunds Should be Prompt. The insurance company should deliver a policy within 30 days. If it does not, contact the company and obtain in writing the reason for the delay. If 60 days go by without a response, contact your state insurance department.

Use the "Free-Look" Provision. Insurance companies must give you at least 30 days to review a Medigap policy. If you decide you don't want the policy, send it back to the agent or company within 30 days of receiving it and ask for a refund of all premiums you paid. Contact your state insurance department if you have a problem getting a refund.

For Your Protection

As noted above, federal criminal and civil penalties can be imposed against anyone who sells you a policy that duplicates coverage you already have unless you sign a statement declaring that the first policy will be cancelled, or unless you have Medicaid and the state Medicaid agency pays the premium for your Medigap policy. Penalties may also be imposed for claiming that a policy meets legal standards for federal certification when it does not, and for using the mail for the delivery of advertisements offering for sale a Medigap policy in a state in which it has not received state approval.

Additionally, it is illegal under federal law for an individual or company to misuse the names, letters, symbols or emblems of the U.S. Department of Health and Human Services, the Social Security Administration, or the Health Care Financing Administration. It also is illegal to use the names. letters, symbols or emblems of their various programs.

This law is aimed primarily at mass marketers who use this information on mail solicitations to either imply or claim that the product they are selling whether it be insurance or something else--has either been endorsed or is being sold by the U.S. government. The advertising literature used by these organizations is often designed to look like it came from a government agency.

If you believe you have been the victim of any unlawful

sales practices, contact your state insurance department immediately. If you believe that federal law has been violated, you may call 1-800-638-6833. In most cases, however, your state insurance department can offer the most assistance in resolving insurance related problems.

Standard Medigap Plans

Following is a list of the 10 standard plans and the benefits provided by each:

PLAN A (the basic policy) consists of these basic benefits:

* Coverage for the Part A coinsurance amount ($174 per day in 1994) for the 61st through the 90th day of hospitalization in each Medicare benefit period.

* Coverage for the Part A coinsurance amount ($348 per day in 1994) for each of Medicare's 60 non-renewable lifetime hospital inpatient reserve days used.

* After all Medicare hospital benefits are exhausted, coverage for 100% of the Medicare Part A eligible hospital expenses. Coverage is limited to a maximum of 365 days of additional inpatient hospital care during the policyholder's lifetime. This benefit is paid either at the rate Medicare pays hospitals under its Prospective Payment System or another appropriate standard of payment.

* Coverage under Medicare Parts A and B for the reasonable cost of the first three pints of blood or equivalent quantities of packed red blood cells per calendar year unless replaced in accordance with federal regulations.

* Coverage for the coinsurance amount for Part B services (generally 20% of approved amount; 50% of approved charges for mental health services) after $100 annual deductible is met.

PLAN B includes the basic benefits plus:

* Coverage for the Medicare Part A inpatient hospital deductible ($696 per benefit period in 1994).

PLAN C includes the basic benefits plus:

* Coverage for the Medicare Part A deductible.

* Coverage for the skilled nursing facility care coinsurance

amount ($87 per day for days 21 through 100 per benefit period in 1994).

* Coverage for the Medicare Part B deductible ($100 per calendar year in 1994).

* 80% coverage for medically necessary emergency care in a foreign country, after a $250 deductible.

PLAN D includes the basic benefits plus:

* Coverage for the Medicare Part A deductible.

* Coverage for the skilled nursing facility care daily coinsurance amount.

* 80% coverage for medically necessary emergency care in a foreign country, after a $250 deductible.

* Coverage for at-home recovery. The at-home recovery benefit pays up to $1600 per year for short-term, at-home assistance with activities of daily living (bathing, dressing, personal hygiene, etc.) for those recovering from an illness, injury or surgery. There are various benefit requirements and limitations.

PLAN E includes the basic benefits plus:

* Coverage for the Medicare Part A deductible.

* Coverage for the skilled nursing facility care daily coinsurance amount.

* 80% coverage for medically necessary emergency care in a foreign country, after a $250 deductible.

* Coverage for preventive medical care. The preventive medical care benefit pays up to $120 per year for such things as a physical examination, flu shot, serum cholesterol screening, hearing test, diabetes screenings, and thyroid function test.

PLAN F includes the basic benefits plus:

* Coverage for the Medicare Part A deductible.

* Coverage for the skilled nursing facility care daily coinsurance amount.

* Coverage for the Medicare Part B deductible.

* 80% coverage for medically necessary emergency care in a foreign country, after a $250 deductible.

* Coverage for 100% of Medicare Part B excess charges. *

PLAN G includes the basic benefits plus:

* Coverage for the Medicare Part A deductible.

* Coverage for the skilled nursing facility care daily coinsurance amount.

* Coverage for 80% of Medicare Plan B excess charges.*

* 80% coverage for medically necessary emergency care in a foreign country, after a $250 deductible.

* Coverage for at-home recovery (see Plan D).

PLAN H includes the basic benefits plus:

* Coverage for the Medicare Part A deductible.

* Coverage for the skilled nursing facility care daily coinsurance amount.

* 80% coverage for medically necessary emergency care in a foreign country, after a $250 deductible.

* Coverage for 50% of the cost of prescription drugs up to a maximum annual benefit of $1,250 after the policyholder meets a $250 per year deductible (this is called the "basic" prescription drug benefit).

PLAN I includes the basic benefits plus:

* Coverage for the Medicare Part A deductible.

* Coverage for the skilled nursing facility care daily coinsurance amount.

* Coverage for 100% of Medicare Part B excess charges. *

* Basic prescription drug coverage (see Plan H for description).

* 80% coverage for medically necessary emergency care in a foreign country, after a $250 deductible.

* Coverage for at-home recovery (see Plan D).

PLAN J includes the basic benefits plus:

* Coverage for the Medicare Part A deductible.
* Coverage for the skilled nursing facility care daily coinsurance amount.
* Coverage for the Medicare Part B deductible.
* Coverage for 100% of Medicare Part B excess charges. *
* 80% coverage for medically necessary emergency care in a foreign country, after a $250 deductible.
* Coverage for 50% of the cost of prescription drugs up to a maximum annual benefit of $3,000 after the policyholder meets a $250 per year deductible (this is called the "extended" drug benefit).
* Plan pays a specified percentage of the difference between Medicare's approved amount for Part B services and the actual charges (up to the amount of charge limitations set by either Medicare or state law).

[Graphic Omitted]

Basic Benefits pay the patient's share of Medicare's approved amount for physician services (generally 20%) after $100 annual deductible, the patient's cost of a long hospital stay ($174/day for days 60-90, $348/day for days 91-150, approved costs not paid by Medicare after day 150 to a total of 365 days lifetime), and charges for the first 3 pints of blood not covered by Medicare.

Two prescription drug benefits are offered:

1. a "basic" benefit with $250 annual deductible, 50% coinsurance and a $1,250 maximum annual benefit (Plans H and I above), and
2. an "extended" benefit (Plan J above) containing a $250 annual deductible, 50% coinsurance and a $3,000 maximum annual benefit.

Each of the 10 plans has a letter designation ranging from "A" through "J". Insurance companies are not permitted to change these designations or to substitute other names or titles. They may, however, add names or titles to these letter designations. While companies are not required to offer all of the plans, they all must make Plan A available if they sell any of the other 9 in a state.

INSURANCE POLICY CHECK-LIST

After reading this guide, you may find this check-list useful in assessing the benefits provided by a Medigap policy or in comparing policies.

	POLICY I		POLICY 2		POLICY 3	
Does the policy cover:	YES	NO	YES	NO	YES	NO
Medicare Part A hospital deductible?						
*Medicare Part A hospital daily coinsurance?						
*Hospital care beyond Medicare's 150-day limit?						
Skilled nursing facility (SNF) daily coinsurance?						
SNF care beyond Medicare's limits?						
Medicare Part B annual deductible?						
*Medicare Part B coinsurance?						
Physician and supplier charges in excess of Medicare's approved amounts?						
*Medicare blood deductibles?						
Prescription drugs?						
Other Policy Considerations						
Can the company cancel or non-renew the policy?						
What are the policy limits for covered services?						
How much is the annual premium?						
How often can the company raise the premium?						
How long before existing health problems are covered?						
Does the policy have a waiting period before any benefits will be paid? How long?						

* Most states now require that these benefits be included in all newly issued Medigap policies.

5. Medicare Q & A: 60 Commonly Asked Questions about MEDICARE

This booklet is meant to provide information about the Medicare

program but is not a legal document. The official Medicare program provisions are contained in the relevant laws, regulations and rulings.

MEDICARE AND MEDICAID

Q. What is Medicare?

A. Medicare is a Federal health insurance program established in 1965 for people aged 65 or older. It now also covers people of any age with permanent kidney failure, and certain disabled people. It is administered by the Health Care Financing Administration (HCFA) of the U.S. Department of Health and Human Services. Local Social Security Administration offices take applications for Medicare and provide information about the program.

Q. What is the difference between Medicare and Medicaid?

A. Medicare is a Federal health insurance program for the elderly and disabled regardless of income and assets. Medicaid, on the other hand, is a medical assistance program jointly financed by the State and Federal governments for eligible low-income individuals. Medicaid covers health care expenses for all recipients of Aid to Families with Dependent Children (AFDC), and most States also cover the needy elderly, blind, and disabled who receive cash assistance under the Supplemental Security Income (SSI) program. Coverage also is extended to certain infants and low-income pregnant women, and, at the option of the State, other low-income individuals with medical bills that qualify them as categorically or medically needy.

Q. How many people are covered by Medicare?

A. Medicare currently covers approximately 35 million people, of whom about 3 million are disabled and some 150,000 are kidney disease patients.

YOUR MEDICARE COVERAGE

Q. What does Medicare cover?

A. Medicare has two parts: Hospital insurance (Part A) and Supplementary Medical insurance (Part B). Part A helps pay for inpatient care in a hospital or skilled nursing facility, or for care from a home health agency or hospice. If you are admitted to a hospital, Medicare provides coverage for a semiprivate room, meals, regular nursing services, operating and recovery room costs, intensive care, drugs, laboratory tests, X-rays, and all other medically necessary services and supplies. Covered

services in a skilled nursing facility include a semi-private room, meals, regular nursing services, rehabilitation services, drugs, medical supplies, and appliances.

Part B helps pay for physician services, outpatient hospital care, clinical laboratory tests, and various other medical services and supplies, including durable medical equipment. Doctors' services are covered no matter where you receive them in the U.S. Covered services include surgical services, diagnostic tests and X-rays that are part of your treatment, medical supplies furnished in a doctor's office, and drugs which cannot be self-administered and are part of your treatment.

Medicare pays only for care that it determines is medically necessary.

WHAT MEDICARE DOESN'T COVER

Q. Are there services Medicare does not cover?

A. While Medicare helps pay a large portion of your medical expenses, there are various health care services and products for which Medicare will not pay. These generally include custodial care; eyeglasses, hearing aids, and examinations to prescribe or fit them; a telephone, TV, or radio in your hospital room; and most outpatient prescription drugs and patent medicines. Medicare also does not pay for cosmetic surgery, most immunizations, dental care, routine foot care, and routine physical checkups. Although some personal care services (for example: bathing assistance, eating assistance, etc.) can be covered along with skilled care, they are never covered alone except under the hospice benefit.

PAYING FOR MEDICARE

Q. How is Medicare financed?

A. Medicare Hospital Insurance (Part A) is financed mainly from a portion of the Social Security payroll tax (the HCA) deduction. The Medicare pan of the payroll tax is 1.45 percent from the employee and 1.45 percent from the employer on wages up to $125,000 in 1991. Medicare Medical Insurance (Part B), which is optional, is financed by the monthly premiums paid by enrollees and from Federal general revenues. The monthly premium in 1991 is $29.90. The premium pays about 25 percent of the cost of the Part B program and general tax revenues pay about 75 percent.

WHO'S ELIGIBLE?

Q. Who is eligible for Medicare?

A. Generally, people age 65 and over can get Part A benefits if they can establish their eligibility for monthly Social Security or Railroad Retirement benefits on their own or their spouse's work record. In addition, certain government employees whose work has been covered for Medicare purposes, and their spouses, can also have Part A.

In rare cases, involving those who became age 65 in 1974 or earlier, Part A may be available if these people meet certain United States residence and citizenship or legal alien requirements.

Part A is also available to most individuals with end-stage renal disease, and to those who have been entitled to Social Security disability benefits or Railroad Retirement disability benefits for more than 24 months, and to certain disabled government employees whose work has been covered for Medicare purposes.

Any person who is eligible for Part A is also eligible to enroll in Part B. Enrollees in Part B must pay a monthly premium of $29.90 in 1991.

MEDICARE ENROLLMENT

Q. How do I sign up for Medicare?

A. If you are already getting Social Security or Railroad Retirement benefit payments when you turn 65, you will automatically get a Medicare card in the mail. The card will usually show that you are entitled to both Part A and Part B, and the beginning dates of your entitlement to each. If you do not want Part B, you can refuse it by following the instructions that come with the card. If you are not receiving such payments, you may have to apply for Medicare coverage. Check with Social Security to see if you are able to get Medicare under the Social Security system or based on Medicare-covered government employment; check with the Railroad Retirement office if you are able to get Medicare under the Railroad Retirement system. If you must file an application for Medicare, you should do so during your initial seven-month enrollment period that starts three months before the month you first meet the requirements for Medicare.

GETTING MORE INFORMATION

Q. Whom do I call to get more information about Medicare?

A. If you want to know how and when to sign up for Medicare, or how to change an address or replace a lost Medicare card, contact any Social Security office.

ENROLLING LATE FOR PART B

Q. When I enrolled in Medicare Part A, I did not sign up for Part B. Is that coverage still available to me on the same terms?

A. You may still enroll in Part B during the annual general enrollment period from January 1 to March 31, and your coverage will begin on July 1. However, your monthly premium may be higher than it would have been had you enrolled in Part B when you enrolled in Part A. In most cases, if you defer your enrollment in Part B, you must pay a monthly premium surcharge. The surcharge is 10 percent for each 12-month period in which you could have been enrolled but were not.

You may not have to pay the surcharge if you are covered by an employer health plan. Delayed enrollment without penalty is generally available if you have been covered by an employer health plan based on your or your spouse's current employment since you were first able to get Medicare. In that case, you can enroll in Part B during a special 7-month enrollment period. The period begins with the month the employer group health plan coverage ends, or with the month the employment on which it is based ends, whichever is earlier. In the case of certain disability beneficiaries, the special period begins when Medicare replaces the employer group health plan as the primary payer of the beneficiary's covered medical services.

DO YOU HAVE BOTH PART A & B COVERAGE?

Q. How do I know whether I'm covered by one or both parts of Medicare?

A. Your Medicare card shows the coverage you have [Hospital Insurance (Part A), Medical Insurance (Part B), or both] and the date your protection started.

Q. What does the letter mean that appears after my health insurance claim number on my Medicare card?

A. It is a code used by Social Security to indicate the type of benefits you are receiving. There may also be another number after the letter. Your full claim number must always be included on all Medicare claims and correspondence.

BUYING MEDICARE

Q. If I am not entitled to Medicare based on employment, can I buy the coverage?

A. Individuals age 65 or over who are United States residents and either United States citizens, or aliens who have been lawfully admitted for permanent residence and have resided in the United States for at least five years at the time of filing, can purchase both Part A and Part B, or just Part B. The monthly premiums in 1991 are $177 for Part A and $29.90 for Part B.

GETTING MEDICARE-COVERED CARE

Q. Are there different health care systems Medicare beneficiaries can use to get their Medicare benefits?

A. Yes. You can receive services covered by Medicare either through the traditional fee-for-service (pay-as-you-go) delivery system or through coordinated care plans, such as health maintenance organizations (HMOs) and competitive medical plans (CMPs), which have contracts with Medicare.

Whether you choose fee-for-service or coordinated care, you get all of Medicare's hospital and medical benefits. The care provided by both systems is comparable. The differences in the two systems include how the benefits are delivered, how and when payment is made and how much you might have to pay out of your pocket. Most of the information in this booklet pertains to fee-for-service health care. For more information about coordinated care plans, request a copy of the leaflet titled Medicare and Coordinated Care Plans from any Social Security office.

FEE-FOR-SERVICE

Q. How does the fee-for-service system work?

A. Under the fee-for-service health care system you have freedom of choice. You can choose any licensed physician and use the services of any hospital, health care provider, or facility approved by Medicare that agrees to accept you as a patient. Generally a fee is paid each time a service is used. Medicare, within certain limits, pays a large portion of the hospital, physician, and other health care expenses.

HMOs AND CMPs

Q. How do coordinated care plans work?

A. In a coordinated care plan (HMO or CMP) a network of health care providers (doctors, hospitals, skilled nursing facilities, etc.) generally offers comprehensive, coordinated medical services to plan members on a prepaid basis. Except in an emergency, services usually must be obtained from the health care professionals and facilities that are part of the plan. Care may be provided at a central facility or in the private practice offices of the doctors and other professionals affiliated with the plan.

ENROLLING IN AN HMO

Q. Can I enroll in a HMO?

A. Yes. You may enroll in any HMO or CMP that has a contract with Medicare. The only requirements are that you live in the plan's service area and be enrolled in Medicare Part B. Medicare makes a monthly payment to the plan to provide you with Medicare-covered services. Some plans provide additional services, and most charge enrollees a monthly premium and nominal copayments when a service is used. Contact plans in your area for enrollment and coverage information.

DISENROLLING FROM AN HMO

Q. If I enroll in a coordinated care plan, can I later return to fee-for-service Medicare coverage?

A. Yes. You may disenroll from a coordinated care plan at any time. Your coverage under fee-for-service Medicare will begin the first day of the following month. You may also change from one plan to another simply by enrolling in the second plan.

CHARGES YOU PAY

Q. Do Medicare beneficiaries have to pay any charges out of their own pockets when they use covered services?

A. Yes. Both Part A and Part B have deductible and coinsurance amounts for which you are liable. You also must pay all permissible charges in excess of Medicare's approved amounts for Part B services, and charges for services not covered by Medicare. These charges do not apply to you if you are enrolled in a coordinated care plan. Instead, you generally must pay a monthly premium to the plan and nominal copayments when a service is used.

HELP FOR LOW-INCOME BENEFICIARIES

Q. Is assistance available to help low-income Medicare beneficiaries pay Medicare's premiums, deductibles and coinsurance amounts?

A. Yes. If your annual income is below the national poverty level and you do not have access to many financial resources, you may qualify for government assistance under the State Medicaid program in paying Medicare monthly premiums and at least some of the deductibles and coinsurance amounts. The national poverty income levels for 1991 are $6,620 for one person and $8,880 for a family of two. If you think you may qualify, you should contact your State or local welfare, social service or public health agency.

PART B DEDUCTIBLE AND COINSURANCE AMOUNTS

Q. How much are the Part B deductible and coinsurance amounts?

A. The Medicare Part B deductible in 1991 is $100 per year. This means that you are responsible for the first $100 of approved expenses for physician and other medical services and supplies. The deductible is paid when you are first charged for covered services. After the deductible has been met, then Medicare starts paying. Medicare generally pays 80 percent of all other approved charges for covered services for the rest of the year. You are responsible for the other 20 percent. If the physician or supplier does not accept assignment of the Medicare claim (that is, accept Medicare's approved amount as payment in full), you are responsible for all permissible charges in excess of the approved amount. You also generally are liable for charges for services not covered by Medicare. Them is no deductible or coinsurance for home health services.

PART A DEDUCTIBLE AND COINSURANCE AMOUNTS

Q. How much are the Part A deductible and coinsurance amounts?

A. The Part A deductible is $628 per benefit period in 1991. This means that if you are admitted to the hospital, you are responsible for the first $628 of Medicare-covered expenses. After that, Medicare pays all covered expenses for the first 60 days. For the next 30 days, Medicare pays all covered expenses except for a coinsurance amount of $157 per day in 1991. You are responsible for the $157 per

day. Whenever more than 90 days of inpatient hospital care are needed in a benefit period, you can use your lifetime reserve days to pay for covered services. Every person enrolled in Part A has a lifetime reserve of 60 days for inpatient hospital care. Once used, these days are not renewed. When a reserve day is used, Medicare pays for all covered services except for a coinsurance amount of $314 a day in 1991. You are responsible for the $314 a day. Because the Part A deductible applies to each benefit period, you could have to pay more than one deductible in a year if you were hospitalized more than once.

SKILLED NURSING FACILITY CARE

Q. What if I require care in a skilled nursing facility after leaving the hospital?

A. If, after being in a hospital for at least three days, you receive covered care in a skilled nursing facility that has been approved to participate in the Medicare program, Part A will help cover services for up to 100 days per benefit period. Medicare pays all covered expenses for the first 20 days and all but $78.50 per day in 1991 for the next 80 days. You are responsible for the $78.50 per day.

BENEFIT PERIOD

Q. What is a benefit period?

A. A benefit period is a way of measuring your use of Medicare Part A services. A benefit period, which applies to hospital and skilled nursing facility care, begins the day you are hospitalized and ends after you have been out of the hospital or skilled nursing facility for 60 days in a row. It also ends if you remain in a skilled nursing facility but do not receive any skilled care there for 60 days in a row. There is no limit to the number of benefit periods you can have.

PROCESSING MEDICARE CLAIMS

Q. Who processes Medicare claims and payments?

A. Medicare claims and payments are handled by insurance organizations under contract to the Federal government. The organizations handling claims from hospitals, skilled nursing facilities, home health agencies, and hospices are called "intermediaries." You almost never have to get involved in the Part A claims process. The insurance organizations that handle Medicare's Part B claims are called "carriers." The names and addresses of the carriers

and areas they serve are listed in the back of The Medicare Handbook, available from any Social Security Administration office.

MEDICARE APPROVED AMOUNT

Q. How does Medicare determine its approved amounts for physician services?

A. Medicare's approved amount, which is also referred to as the reasonable or allowable charge, is determined in the following manner for most Part B claims:

When a doctor submits a claim, the Medicare carrier compares the amount submitted with the doctor's usual charge for the service and with the amounts other physicians in the community usually charge for the same service. The lowest of the three becomes the approved amount. After you have met the Part B annual deductible ($100 in 1991), Medicare generally pays 80 percent of the approved amount and you are liable for the other 20 percent. A NEW SYSTEM FOR DETERMINING THE AMOUNT PHYSICIANS WILL BE PAID FOR PROVIDING SERVICES COVERED BY MEDICARE WILL BE INTRODUCED IN 1992.

ACCEPTING MEDICARE ASSIGNMENT

Q. What does it mean when a physician accepts assignment?

A. Physicians and suppliers who accept assignment of Medicare claims agree to not charge you more than the Medicare approved amount for services and supplies covered by Part B. They are paid directly by Medicare, except for the deductible and coinsurance amounts for which you are responsible. Some physicians and suppliers have signed agreements to participate in Medicare. In doing so, they have agreed to accept assignment of Medicare claims all of the time. Other physicians and suppliers will accept assignment on a case-by-case basis or not at all.

PHYSICIANS WHO DON'T ACCEPT ASSIGNMENT

Q. What if a physician does not accept assignment of a Medicare claim?

A. Physicians and suppliers who do not accept assignment of Medicare claims may charge more than the Medicare approved amount and collect full payment directly from you. Medicare then pays you 80 percent of the approved amount for the covered service, less any unmet portion of the $100 Part B deductible. You are liable for all permissible

charges in excess of Medicare's approved amount.

LIMITING A PHYSICIAN'S CHARGES

Q. Is there a limit to the amount a physician can charge a Medicare beneficiary for a covered service?

A. Yes. Physicians who do not accept assignment of a Medicare claim are limited as to the amount they can charge Medicare beneficiaries for covered services. In 1991, charges for visits and consultations cannot be more than 140% of the Medicare prevailing charge for physicians who do not participate in Medicare. For most other services (surgery, for example) the limit is 125 percent of the prevailing charge for nonparticipating physicians. In 1992 the limiting charge for all services covered by Medicare will be 120 percent of the fee schedule amount for nonparticipating physicians and in 1993 it will be 115 percent of the fee schedule amount.

FINDING PARTICIPATING PHYSICIAN

Q. How can I find a Medicare-participating physician or supplier?

A. The names and addresses of Medicare-participating physicians and suppliers are listed by geographic area in the Medicare-Participating Physician/Supplier Directory. You can get the directory for your area free of charge from your Medicare carrier (listed in the back of The Medicare Handbook) or you can call your carrier and ask for names of some participating physicians and suppliers in your area. This directory is also available for review in Social Security offices, State and area offices of the Administration on Aging, and in most hospitals. Physicians and suppliers are given the opportunity each year to sign Medicare participation agreements.

FILING A PART B CLAIM

Q. When a physician provides Medicare-covered services to a Medicare beneficiary, does the physician or beneficiary file the claim with the Medicare carrier for payment?

A. For Medicare-covered services and supplies received on or after September 1, 1990, the physician or supplier is required to submit the claim for the beneficiary. For services and supplies provided prior to that date, the physician or supplier was not required to submit the claim unless the physician or supplier participated in Medicare or had agreed to accept assignment of the claim.

WHAT TO DO WHEN YOU HAVE A PROBLEM WITH A CLAIM

Q. Whom do I call if I have a question about a Medicare claim for a doctor's services?

A. Call the Medicare carrier for your area. The carrier's name and toll-free telephone number are listed in the back of The Medicare Handbook and appear on all Explanation of Medicare Benefit (EOMB) forms.

Q. How long should I wait before contacting the Medicare carrier to check on the status of a claim?

A. Allow 30 to 45 days for the claim to be paid. If you have not received a check or an Explanation of Medicare Benefit (EOMB) payment statement after 45 days, call the Medicare carrier for your area.

APPEALING A CLAIMS PAYMENT DECISION

Q. What recourse do I have if Medicare denies payment for a claim or pays less than I think it should?

A. You have a fight to appeal Medicare's coverage and payment determinations for both the hospital (Part A) and medical (Part B) segments of Medicare. The appeals processes are explained in The Medicare Handbook.

AMBULANCE SERVICES

Q. Does Medicare cover ambulance services?

A. Medicare Part B can help pay for certain medically necessary ambulance services when: (1) the ambulance, equipment, and personnel meet Medicare requirements; and (2) transportation by any other means would endanger your health. This includes transportation from a hospital to a skilled nursing facility, or from a hospital or skilled nursing facility to your home. Medicare will also cover a round trip from a hospital or a participating skilled nursing facility to an outside supplier to obtain medically necessary diagnostic or therapeutic services not available at the hospital or skilled nursing facility where you are an inpatient.

MEDICARE COVERAGE FOR WHEELCHAIRS, PACEMAKERS, AND ARTIFICIAL LIMBS

Q. Does Medicare cover prostheses and medical devices?

A. Yes. Medicare covers these items when provided by a hospital, skilled nursing facility, home health agency, hospice, comprehensive outpatient rehabilitation facility (CORP), or a rural health clinic. Medicare also covers cardiac pacemakers, corrective lenses needed after cataract surgery, colostomy or ileostomy supplies, breast prostheses following a mastectomy, and artificial limbs and eyes. Coverage also is provided for durable medical equipment, such as wheelchairs, hospital beds, walkers, and other equipment prescribed by a doctor for home use.

NURSING HOME CARE

Q. Does Medicare pay for long-term care in a nursing home?

A. No. Medicare only helps pay for post-hospital extended care in a skilled nursing facility (SNF). A SNF is a specially qualified facility with the staff and equipment to provide skilled nursing care, a full range of rehabilitation therapies, and related health services. Medicare only pays when a skilled level of care is required as a continuation of a hospital stay and the care is provided in a SNF that participates in Medicare. Even if you are in a SNF that participates in Medicare, Medicare will not pay if the services you receive are mainly personal care or custodial services, such as help in walking, getting in and out of bed, eating, dressing, and bathing. A SNF that participates in Medicare will inform you at the time of admission about potential Medicare payment and your rights to seek payment.

CHIROPRACTIC SERVICES

Q. Will Medicare pay for a chiropractor's services?

A. Medicare helps pay for only one kind of treatment furnished by a licensed chiropractor: manual manipulation of the spine to correct a subluxation that can be demonstrated by X-ray.

PSYCHIATRIC COVERAGE

Q. Does Medicare pay for care in a psychiatric hospital?

A. Yes. Medicare Part A helps pay for up to 190 days of inpatient care in a participating psychiatric hospital during a beneficiary's lifetime.

CHECKING FOR CANCER

Q. Does Medicare pay for cervical- and breast-cancer screenings?

A. Yes. Medicare Part B helps pay for Pap smears to screen for the detection of cervical cancer and for X-ray screenings for the detection of breast cancer.

HOME HEALTH CARE

Q. Does Medicare cover home health care?

A. Yes. If you need skilled health care in your home for the treatment of an illness or injury, Medicare pays for covered home health services furnished by a participating home health agency. To qualify, you must be homebound, need part-time or intermittent skilled nursing care, physical therapy, or speech therapy. You also must be under the care of a physician who determines you need home health care and sets up a home health care plan for you.

COVERAGE LIMITS

Q. How long can home health care last?

A. Home health care can continue for as long as you are under a physician's plan of care and the services you require are the type of services Medicare covers, such as skilled nursing, physical therapy, and speech therapy. Home health aide services are also available if you are eligible. Daily skilled care is available on a limited basis to those beneficiaries who qualify.

WHO PAYS?

Q. How much does Medicare pay toward the cost of home health care?

A. Medicare pays the full approved cost of all covered home health visits. There is no coinsurance on home health care. You may be charged only for any services or costs that Medicare does not cover. However, if you need durable medical equipment, you are responsible for a 20 percent coinsurance payment for the equipment.

MEDICARE AND HOSPICE CARE

Q. What is hospice care?

A. Hospice is a special way of caring for a patient whose disease cannot be cured and whose medical life expectancy is six months or less. Patients receive a full scope of palliative medical and support services for their terminal illnesses.

Q. Is hospice care available to Medicare beneficiaries?

A. Yes. Medicare beneficiaries certified by a physician to be terminally ill may elect to receive hospice care from a Medicare-approved hospice program. Under Medicare, hospice is primarily a comprehensive home care program that provides medical and support services for the management of a terminal illness. Beneficiaries who elect hospice care are not permitted to use standard Medicare to cover services for the treatment of conditions related to the terminal illness. Standard Medicare benefits are provided, however, for the treatment of conditions unrelated to the terminal illness. Medicare has special benefit periods for beneficiaries who enroll in a hospice program.

PROs

Q. What are PROs?

A. Utilization and Quality Control Peer Review Organizations (PROs) are physician-sponsored organizations in each State that the Health Care Financing Administration (HCFA) contracts with to ensure that Medicare beneficiaries receive care which is medically necessary, reasonable, provided in the appropriate setting, and which meets professionally accepted standards of quality. Among other things, PROs are responsible for intervening when quality problems are identified and for making every attempt to resolve them. They ensure that beneficiaries are advised of their appeal rights and review all written complaints from beneficiaries or their representatives concerning the quality of care rendered. If you are admitted to a hospital, you will receive a notice explaining your rights under Medicare and how to contact the PRO if the need arises.

MEDICARE AND FOREIGN TRAVEL

Q. If I require medical services outside the United States and its territories, will Medicare pay the bills?

A. No. But there are three exceptions. Medicare will help pay for care in qualified Canadian or Mexican hospitals if:

(1) You are in the United States when an emergency occurs, and

a Canadian or Mexican hospital is closer to, or substantially more accessible from, the site of the emergency than the nearest U.S. hospital that can provide the emergency services you need.

(2) You live in the United States and a Canadian or Mexican hospital is closer to, or substantially more accessible from, your home than the nearest U.S. hospital that can provide the care you need, regardless of whether an emergency exists, and without regard to where the illness or injury occurs.

(3) You are in Canada travelling by the most direct route between Alaska and another State when an emergency occurs, and a Canadian hospital is closer to, or substantially more accessible from, the site of the emergency than the nearest U.S. hospital that can provide the emergency services you need.

WHO PAYS FIRST?

Q. Is Medicare always the primary payer of a beneficiary's medical bills or are there situations when another insurer must pay first?

A. There are a number of situations in which another insurer is the primary payer of your health care costs and Medicare is the secondary payer. For example, Medicare may be the secondary payer if you are covered by an employer group health insurance plan, are entitled to veterans benefits, workers' compensation, or black lung benefits. Medicare also can be the secondary payer if no-fault insurance or liability insurance (such as automobile insurance) is available as the primary payer. In cases where Medicare is the secondary payer, Medicare may pay some or all of the charges not paid by the primary payer for services and supplies covered by Medicare. This issue is discussed in more detail in the publication titled Medicare Secondary Payer, available from any Social Security office.

MEDIGAP INSURANCE

Q. What is "Medigap" insurance?

A. Medigap insurance is private health insurance designed specifically to supplement Medicare's benefits by filling in some of Medicare's coverage. A Medigap policy generally pays for Medicare approved charges not paid by Medicare because of deductibles or coinsurance amounts that you are liable for. There are Federal minimum standards for such policies which most States include as pan of their programs to regulate Medigap policies. Because Medigap

policies can have different combinations of benefits and the policies may vary from one insurance company to another, you should compare policies before buying. Compare the benefits and the premiums. Some policies may offer better benefits than others at a lower premium.

MEDIGAP TO BE STANDARDIZED IN 1992

Q. Is it true that Medigap policies are to be standardized?

A. Yes. During 1992 most States are expected to adopt regulations limiting the Medigap insurance market to no more than 10 standard policies. One of the 10 will be a basic policy offering a "core package" of benefits. The other nine will each have a different combination of benefits, but they all must include the core package. Insurers will not be permitted to change the combination of benefits in any of the 10 standard policies. Individual States will be allowed to limit the number of the different standard policies sold in the State to fewer than 10 if they wish to do so, but must ensure that insurers offer the basic policy. For more information on this subject, contact your State insurance department.

GAPS IN YOUR MEDICARE COVERAGE

Q. What are the "gaps" in Medicare coverage?

A. In general, they are charges for which you are responsible. They include Medicare's deductibles and coinsurance amounts, permissible charges in excess of Medicare's approved amounts, additional days of care in a hospital or skilled nursing facility, and the charges for the various health care services and supplies that Medicare does not cover. Medigap insurance can cover some or all of these charges, depending on the policy.

ONE MEDIGAP POLICY IS ENOUGH

Q. Do I need more than one Medigap policy?

A. No. One good policy tailored to your needs at a price you can afford is sufficient. Beginning in 1992 most States are expected to make it unlawful for an insurance company or agent to sell a second or replacement Medigap policy to an individual unless the purchaser states in writing that the first policy is to be cancelled. Medicare beneficiaries enrolled in coordinated care plans (HMOs and CMPs) or who are eligible for Medicaid usually do not need Medigap insurance. If you have insurance from an employer or labor association, you may also not need Medigap

insurance.

MEDICARE SELECT

Q. What is Medicare SELECT insurance?

A. Medicare SELECT is the name for a new Medigap health insurance product that is expected to be introduced in 1992 in 15 States to be designated in 1991 by the Secretary of the U.S. Department of Health and Human Services. During the three-year period currently authorized under Federal law, Medicare SELECT will be evaluated to determine how it should eventually be made available throughout the Nation. Medicare SELECT is private insurance, it is not issued by the government and it is not part of Medicare. It is designed to supplement Medicare coverage.

Q. What is the difference between Medicare SELECT and other Medigap insurance?

A. The principal difference is that Medicare beneficiaries who buy a Medicare SELECT policy are expected to be charged a lower premium for that policy in return for agreeing to use the services of a network of designated physicians and other health care professionals. These health care professionals, called "preferred providers," will be selected by the insurers. Each insurance company that offers a Medicare SELECT policy will have its own network of preferred providers. Policyholders usually will be required to use a preferred provider if the insurance company is to pay full benefits. Medicare will continue to pay its portion of covered benefits regardless of whether a preferred provider was used or not. Beneficiaries who buy other Medigap insurance policies are not required to use doctors and other providers designated by the insurance company.

GETTING MORE INFORMATION ABOUT SUPPLEMENTAL INSURANCE

Q. Where can I get information about insurance to supplement my Medicare benefits?

A. Contact your local Social Security office, State office on aging, or your State insurance department and ask for a copy of the Guide to Health Insurance for People with Medicare. It describes Medicare's benefits and the types of private insurance available to supplement Medicare. If you need help in selecting supplemental insurance, check with your State insurance department. Some departments offer counselling services.

MEDIGAP COMPLAINTS

Q. Whom should I contact if I have a complaint about the agent who sold me a Medigap policy?

A. Suspected violations of the laws governing the sales and marketing of Medigap policies should be reported to your State insurance department or Federal authorities. The Federal toll-free telephone number for registering such complaints is 1-800-638-6833.

SECOND SURGICAL OPINIONS

Q. Whom do I call if I want a second surgical opinion?

A. If your physician has recommended surgery for a non-emergency condition covered by Medicare and you want the names of doctors in your area who provide second opinions for elective surgery, call your Medicare carrier. Many conditions that do not require immediate attention can be treated equally well without surgery.

REPORTING FRAUD

Q. Where do I report suspected cases of Medicare fraud?

A. If you have evidence of or suspect fraud or abuse of the Medicare or Medicaid programs, call your Medicare carrier.

CHANGING YOUR ADDRESS

Q. I moved. How do I get my address changed?

A. You should call your local Social Security office and ask that your Medicare file be changed to reflect your new address.

FREE PUBLICATIONS

Q. What free publications are available that explain Medicare?

A. The following publications may be obtained from any Social Security office or by writing to: Medicare Publications, Health Care Financing Administration, 6325 Security Boulevard, Baltimore, Md. 21207, or Consumer Information Center, Department 59, Pueblo, CO 81009.

* The Medicare Handbook
  Guide to Health Insurance for People with Medicare (507-X)
  Medicare and Coordinated Care Plans (509-X) Medicare
  Hospice Benefits (508-X)
  Medicare and Employer Health Plans (586-X) Getting A
  Second Opinion (536-X)
  Medicare Coverage of Kidney Dialysis and Kidney
    Transplant Services (587-X)
* Medicare Secondary Payer

* Not available from Consumer Information Center.