



strike against stroke

The Importance of Educating Employees About Stroke

by Dr. Frederick Munschauer

The Research Center for Stroke & Heart Disease and the National Business Coalition on Health are providing for your use important information for educating the public about the prevention of stroke. In the barrage of information you are asked to share with your employees, stroke could be easy to disregard. "Hey, stroke is an old person's disease and my workforce is pretty young." But stroke is already increasing your direct health care costs since employees in their 30's, 40's and 50's may suffer a stroke. Stroke is also compromising the productivity of your workforce when younger employees take time to care for their elder loved ones who have had a stroke.

STROKE FACTS

- 731,000 Americans stricken each year.
- Third leading cause of death in the U.S. at 160,000 per year.
- The leading cause of disability.
- After 80 years of decreasing, the rate of stroke is rising.

Why is stroke awareness important to your organization?

1. **Stroke destroys lives** – crippling or killing the victim and deeply affecting the lives of those around them.
 - Stroke is the third leading cause of death in America.
 - Stroke is the leading cause of disability in America.
2. **Stroke costs your organization time, money and talent** – odds are that, in the coming year, stroke will either affect several of your employees directly or reduce their productivity while they serve as caregivers to loved ones who have had a stroke.
3. **Stroke is preventable** – frequently with only minimal efforts. About 20% of all strokes could be prevented by checking the rhythm of your pulse and then knowing what to do.
4. **Preventing stroke in your workforce can improve productivity and reduce costs** – similar to workplace injuries, stroke is preventable.
5. **Some simple stroke prevention techniques will have a net positive return on health care costs.** Potentially lowering premiums and reducing the costs of lost productivity; reducing costs of lost productivity not only from current employees directly affected by stroke, but also from employees forced to become caregivers for stroke survivors.

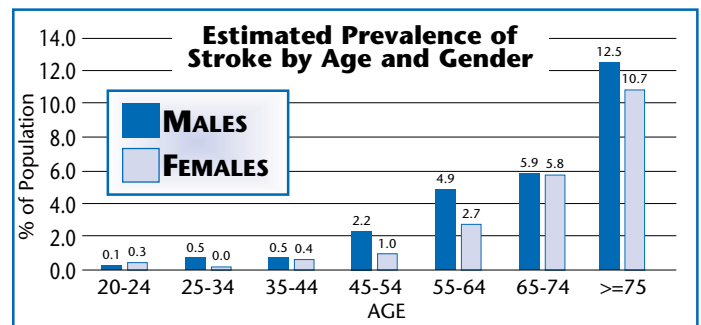
STROKE SURVIVORS...

THE AFTERMATH

- 31% die within 1 year.
- 16% need institutional care.
- 31% need help caring for themselves.
- 20% need help walking.
- 71% have work limitations.

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Stroke prevention begins with an educated workforce. These are just some of the reasons why you should review the additional information on stroke and stroke prevention on the subsequent pages and provide it to your employees. The following pages include the basics of stroke and stroke prevention, and the steps you can take to help minimize the occurrence of this devastating disease and its impact to your employees and your company.



THE BASICS

Stroke is a horrible disease: Which do you fear most, stroke or a heart attack? More than 66% of people fear a stroke more than heart attack, and for good reason. Stroke is a brain attack, and occurs when a blood clot blocks a blood vessel or artery, or when a blood vessel breaks, interrupting blood flow to an area of the brain.

Stroke is the **leading cause of disability** in America and the third leading cause of death.

- 31% of stroke victims die in the first year after stroke.
- Of those who survive, 16% are institutionalized and another 20% need daily help caring for themselves.
- 71% of stroke victims never return to their original job.
- After nearly 80 years of declining rates, stroke rates are rising again.

Stroke isn't just an old person's disease: Stroke can occur at any age, even in children and baby boomers. It frequently strikes in mid-life.

- Each year, in an average corporation of 2,300 employees with a mean age of 42, about six (6) employees will suffer a stroke.
- Sadly, four of these employees will never return to work.
- A 55-year-old male who smokes and has hypertension has a 15% chance of suffering a stroke before retiring at the age of 65.

Stroke is an expensive disease: The average direct medical cost of a stroke is \$48,000 in the first year alone. The average yearly direct medical cost thereafter is \$15,000.

- Using the example above, if you are a large employer of 2,300 employees with the typical six strokes annually, your direct medical costs related to stroke are about \$288,000 each year.
- The indirect costs (in terms of lost productivity and re-training) resulting from the six strokes represent expenses to you in addition to insurance premiums.

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Stroke can be expensive even if NONE of your current employees have one: Over the course of a lifetime, four out of every five American families will be touched by stroke.

- For your retirees, the risk of stroke doubles every decade over 55.

- Using the same corporate example with 2,300 employees, on average it will have a retired group (age >65) of about 1,285 people. In this group, eleven (11) people will have a stroke each year. This certainly affects your premiums.

STROKE COSTS FOR A TYPICAL LARGE COMPANY		
# OF EMPLOYEES AND RETIREES	# EACH YEAR WITH NEW STROKE	DIRECT STROKE-RELATED MEDICAL COSTS IN THE FIRST YEAR
Active employees (2,300)	6	\$288,000.00
Retirees (1,285)	11	\$528,000.00
Total	17	\$816,000.00

- Many of your middle-aged employees are entering a period where their aging parents are at a greatly increased risk for stroke. A number of your employees will become caregivers to their elder loved ones with a stroke, driving up your costs in terms of time-off and employee productivity.

Stroke is a preventable disease: Seventy percent of all strokes are preventable. Check out that number again - 70%! Why aren't more people paying attention to this startling statistic? Won't you help us get the message out?

Most employees are not aware of their risk factors: Risk factors for stroke are divided into three groups:

1. Risk factors you can improve through lifestyle choices,

- Simple lifestyle choices can be as effective as medications in preventing stroke. Smoking cessation represents the most obvious but most difficult to achieve goal. We all know that exercise decreases stroke risk. Simple diet choices can also prevent stroke.

RISK FACTORS CHANGED BY LIFESTYLE

- Smoking
- Physical inactivity and obesity
- High fat, high calorie diet
- Drinking too much alcohol

- Simple lifestyle choices reduce the risk of stroke by more than 33%.

2. Risk factors that can be improved through medications,

- Complex genetics influence such risk factors as blood pressure and cholesterol. And while we can't change our genes, we can effectively treat elevated blood pressure and high cholesterol with medications.
- Appropriate medications can reduce the risk another 33% - 70%.

RISK FACTORS CHANGED BY MEDICAL TREATMENT

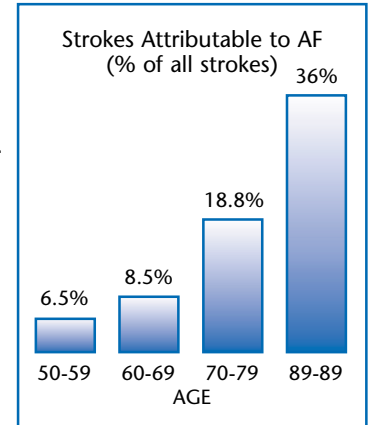
- High blood pressure
- High cholesterol
- Blocked carotid artery
- Diabetes
- Heart disease
- Atrial Fibrillation

3. Risk factors you cannot change.

- Gender, race, age and family history are examples of risk factors you can't change. Males, African-Americans, and Hispanics are at greater risk.

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Some common causes of stroke are not as well known: Fully 20% of all strokes are caused by a common abnormality in the rhythm of the heart referred to as **atrial fibrillation**. An estimated 2.2 million Americans have this condition and each year over 80,000 of them will suffer a stroke. The risk of stroke in an employee with atrial fibrillation who is not treated is 4 - 12% each year. If recognized in time, simple treatment with aspirin or the anticoagulant Coumadin® can reduce the risk of stroke by 70%. Recognizing atrial fibrillation is as easy as taking your pulse; if the pulse is very irregular, you may have atrial fibrillation.



Instructing your employees on this risk factor alone could save many lives and prevent disability. (In the e-mail series, your members will learn how to check themselves for this under-recognized major risk factor).

Elevated levels of homocysteine, a by-product of protein metabolism, have recently been linked to an increased risk for stroke. Taking the vitamin B6 (pyridoxine) and folic acid reduces homocysteine levels and may accordingly reduce the risk of stroke.

How COMMON IS ATRIAL FIBRILLATION (AF)?

- Over 2.2 million in the U.S. have AF
- The chances of having AF increase with age:
 - 5% of people 65
 - 12% of people over 75
- AF is more common in people with high blood pressure, heart or lung disease.

Facts about stroke prevention:

- A very irregular pulse can indicate atrial fibrillation which is a major, under-recognized, treatable risk for stroke.
- In people with high blood pressure, the risk of stroke can be reduced 38% for every 5 points the systolic (upper) blood pressure is lowered.
- In those with elevated cholesterol, reducing cholesterol with either diet, nutraceuticals (foods with natural substances that can reduce cholesterol levels) such as Benecol™ spread, Smart Balance™, or cholesterol-lowering drugs prolongs life.
- When a person stops smoking, his or her risk of stroke decreases to nearly that of someone who has never smoked within 2 years.
- The risk of stroke can be reduced, even if people just cut back on the number of cigarettes smoked daily.
- Simply walking 20 minutes three times weekly can reduce the risk of stroke by 32%.
- Reducing the amount of fat and calories consumed reduces the risk of stroke.
- Eating nuts and drinking orange or grape juice reduces the risk of stroke.
- Alcohol in moderation (1-2 drinks per day) is effective in preventing stroke.



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Stroke risk factors are under-recognized and under-treated by employees: The largest obstacle in the prevention of stroke is recognizing the risk and feeling empowered to effect a change. Knowledge of risk factors and setting goals for their reduction is the aim of all prevention strategies. Educate your employees about the following risk factors:

Atrial Fibrillation:

You don't hear much about this risk factor, and it is challenging to pronounce, but atrial fibrillation (or "AF") increases stroke risk up to six times.

- Fully 60% of the 2.2 million Americans with AF are unaware they have the condition.
- Each year, 4 - 12% of these people will have a stroke if untreated.
- Few people with AF recognize the high risk of stroke.

Cholesterol:

Cholesterol is something we hear a lot about, isn't it? Now, take a look at these startling statistics:

- Only one percent of the population with elevated cholesterol is currently treated.
- Only 60% of individuals with known stroke or heart disease and elevated cholesterol are treated.

Hypertension:

High blood pressure affects approximately 50 million Americans (one-third of the adult population). It is often called the "silent killer" because people can have it and not realize it, since it often has no symptoms.

- Of all people with high blood pressure, only 20% are treated.
- Compounding the problem, of those treated 50% stop taking their high blood pressure medication in the first year.
- Of those who stay on treatment, only 50% are able to reduce their blood pressure to target levels.

Smoking:

Enough already about smoking – but the fact is smoking doubles stroke risk.

- The majority of smokers with stroke or heart disease are never referred to a smoking cessation program.
- Fewer than 15% of smokers who have already suffered a stroke quit.



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Employer efforts to prevent strokes can have a positive return on investment: Let's take a look at some health care economics.

- For people with atrial fibrillation (AF), treatment with Coumadin® results in a net positive return of \$900 per year for each person treated.
- For people with known heart disease or stroke, treatment with the “statin” cholesterol lowering drugs (e.g. Lipitor®, Pravacol®, Zocor®, Mevacor®, Leschol®) represent a net return on investment within five (5) years of starting therapy.
- Close to 23% of all Americans smoke. In our “typical workforce” example of 2,300 employees, 529 are smokers. Approximately 38 minutes of a smoker's eight-hour workday are spent on smoking rituals. Smokers are absent from work up to 6.5 days per year more than nonsmokers. Smokers visit health care facilities up to six times more per year than nonsmokers. Average lifetime medical care costs for smokers compared to nonsmokers are 32 percent higher for men and 24 percent higher for women. Several statistics relating to the average cost per employee for companies indicate it costs \$300 or more annually for smokers versus nonsmokers. An American Health Foundation and Academic Press study released about Zyban®, a smoking cessation drug, indicates a positive return of \$338 per employee who attempts to quit.

Examples of employer efforts: A number of employers are tackling the prevention of stroke and reducing risk factors of their employees:

- PEPCO, a suburban Washington utility company, recognized the importance of teaching employees and retirees the Check Your Pulse America™ technique. They seized the challenge to teach employees and retirees to identify an irregular pulse in themselves or a loved one, then they encouraged people to see their doctor if an irregular heartbeat was detected. As a result, a handful of people learned they had atrial fibrillation and are taking steps to prevent a highly-likely future stroke.
- Appleton Papers implemented a three-year stroke risk reduction program called Score Against Stroke created by ThedaCare. Appleton Papers has a workforce of 4,000. More than 1,600 employees and/or their family members volunteered to take part initially. A screening tool initially provided a score for each participant. Participants signed a contract to reduce their score. At the halfway point, 79 percent of at-risk participants at the plant reduced their stroke scores to one degree or another, and 53 percent reduced their score enough to drop an entire category.
- Storage Technology Corporation claims the number of their employees who now smoke is about 10%. But getting there wasn't easy. Ten to 15 years ago, about 25 percent of their employees smoked. This level of success was achieved through a combination of smoking cessation courses, counseling, and drug therapy. Storage Technology employees paid 50 percent of the cost up front and then, if they were successful at quitting, employees were reimbursed half of their money at six months and the other half after a full year.



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THE PATH FORWARD

We created an easy way to move forward introducing stroke prevention to your workforce. Here is all you need to do:

- **Agree to provide the Strike against Stroke to your workforce.** Encourage your employees to devote some time to reading and understanding the important information about stroke prevention in the e-mails.
- **Encourage your employees to make the simple Check Your Pulse America™ technique a part of their health maintenance routine** (as will be shown in the email series). Like breast self-examination, people can be taught to check their pulse to see if they feel an irregular heartbeat. An irregular heartbeat can be a sign of atrial fibrillation (AF). Once identified and properly treated, the risk of stroke caused by AF can be reduced by 70%, which can have a great impact on reducing health care costs. Encourage your employees to teach the Check Your Pulse™ technique to their loved ones.
- **Let your employees know their good health is valued by you as an employer.** Offer creative incentives for employees who take prevention of stroke seriously.

In summary: Are you startled by some of the figures we have shared here? With these striking facts about stroke, isn't it amazing Americans don't know more about it? We hope to change this with your help. You can lend a hand and make a difference with minimal effort as suggested above. The net benefit is that you not only save health care costs, but you also save lives. Encourage your employees to learn more about preventing stroke by reading the interactive email presentation. Remember prevention begins with an educated workforce. minimal effort as suggested above. The net benefit is that you not only save health care costs, but you also save lives. Encourage your employees to learn more about preventing stroke by reading the interactive email presentation. Remember prevention begins with an educated workforce.