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By the time you finish reading this article, three Americans will suffer and one will die from a brain attack/stroke. Annually, brain attacks are the leading cause of serious, long-term disability in the United States and the third leading cause of death (160,000 fatalities annually). Brain attacks strike approximately 750,000 Americans every year.

The purpose of this resource guide is to provide information about different aspects of stroke. It is hoped information presented here will help readers to better understand stroke. Prevention of stroke is an important goal of the Delaware Stroke Initiative (DSI). We hope to help stroke survivors avoid recurrent stroke and help those at risk to prevent a first stroke. This guide also provides stroke survivors as well as their families, friends, and caregivers with useful information to help them adjust to life following a stroke or brain attack.

It has been estimated that approximately one-third of all stroke survivors will have another stroke within 5 years of their initial stroke. In America today, approximately four out of five families will be touched by a stroke. According to the Framingham Study data collected in 1991 and published by the American Heart Association in 1996, approximately 31% of stroke survivors will require assistance following a stroke; about 20% will require help walking and 16% become institutionalized.

This guide includes educational information about the types of stroke, warning signs of stroke, stroke risks as well as a collection of articles that walk you through the steps following a stroke and what you can expect along the road to recovery. Resources listed in this publication include a glossary of stroke terms, suggested web sites, and national and state organizations that provide information, social activities and assistance for stroke survivors.

DSI, a 501 (c) (3) non-profit association, was founded in 1999 by Ellen Barker as the only non-profit organization in Delaware that is totally dedicated to stroke. DSI’s mission is to reduce the incidence of stroke and to improve outcomes. The organization is comprised of a Board of Directors with representation from the medical community, corporate sponsors, support groups, local businesses, stroke survivors and a passionate base of volunteers. DSI recognizes stroke as a major health problem and the third leading cause of death in Delaware and the leading cause of adult disability. With the knowledge that more women die each year from stroke than die of breast cancer and that every minute in the United States someone experiences a stroke, DSI’s mission is to reduce death, disability and dependency from stroke in Delaware. The best treatment is prevention.

DSI has consistently maintained a strong belief that because of its single-minded focus on stroke, we are uniquely capable of collaborating with other organizations in the state to marshal resources, activities and commitment to deliver consistent and complementary stroke programs for stroke within the state of Delaware.

To obtain a “Stroke Risk Screening Questionnaire” visit our Web site at: www.delstroke.org. You can also reach us at (302) 757-4886 or, destrokeinitiative@yahoo.com.
DSI SUPPORT GROUP

Following a stroke, individuals may need support in understanding and dealing with stroke-related effects and physical and social functioning. Stroke survivors may be young or older adults, minimally or severely physically or cognitively impaired, employed or unemployed, and have few family and community resources available to them. Successful recovery from a stroke is not limited to physical recovery or return to the pre-stroke level. Reintegration to normal life at home may require many adjustments. There may be very subtle or very noticeable changes in personality after a stroke that affects mood, sexual functioning, problem solving, and sensory changes that affect the quality of life. DSI is pleased to sponsor a support group as an important community service to help stroke survivors and their families learn about community resources, get educational information and share their personal experiences in a positive and supportive environment.

Anyone who has recovered from a stroke, their families, and friends are welcome to attend. Health care professionals are also invited to attend and participate in meetings. For more information please call (302) 757-4886 or email destrokeinitiative@yahoo.com.

FREE DELAWARE STROKE INITIATIVE SUPPORT GROUP

Meetings: 2nd Thursday of every month
Time: 7pm-8:45pm
Location: Newark Senior Center
200 White Chapel Road
Newark, DE 19711

Note: This publication is presented for the purpose of education about stroke. Nothing herein should be construed as medical diagnosis or treatment advice. The information contained should not be used in the place of calling your physician or health care provider. Please contact your physician or health care provider for your individualized health care, questions or additional information about stroke.
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DSI Needs Your Support!
The Delaware Stroke Initiative is a 501(c)(3) non-profit that is working to reduce the incidence of stroke and improve stroke outcomes in Delaware. We provide Delaware residents with educational materials like this resource guide, a monthly support group, and risk assessment screenings. These services are all provided free of charge. DSI is only able to survive on donations. Please consider making a tax deductible donation or designate Delaware Stroke Initiative (Code 9430) on your United Way of Delaware Pledge Form.

Thank you.
What is Stroke?

The brain is responsible for coordinating how we move, think, speak, hear, see, feel, and behave. To function properly, brain cells must have a continuous supply of oxygen and other nutrients from the blood. When the blood supply is disrupted, even for a few minutes, areas of the brain may be damaged and a person may suddenly lose some of the functions controlled by that region of the brain. This sudden loss of function is referred to as a stroke.

Blood is continuously pumped from the heart to the brain via several artery groups. Within the brain, these arteries branch into smaller and smaller arteries and then into tiny thin-walled vessels (called capillaries) which supply the oxygen and nutrients that the brain tissue needs. It is when this continuous blood supply is disrupted that brain cells die and a stroke results.

A stroke is the result of a sudden blockage caused by a clot, narrowing of an artery, or bursting of a blood vessel. It is this distinction that defines the main types of stroke. The two main kinds of strokes are known as ischemic and hemorrhagic.

Ischemic Stroke

Ischemic is the most common type of stroke and constitutes an estimated 80 percent of all strokes. An ischemic stroke results when a blood vessel leading to the brain becomes blocked. This type of stroke may occur for three main reasons:

1. A blood clot (or thrombus) forms inside an artery in the brain, blocking the flow of blood. Referred to as thrombotic stroke, this is the most common type of ischemic stroke. Blood clots form most often in arteries damaged by atherosclerosis, a disease in which rough fatty deposits, or plaque, build up on the walls of the artery. These deposits can crack and expose substances that induce clots to form.

2. A clot forms in the blood, but unlike thrombotic stroke, it originates somewhere other than the brain. This type of stroke is referred to as an embolic stroke and occurs when a piece of clot (an embolus) or plaque fragment breaks loose and is carried in the bloodstream to the brain. An embolus can form in many places in the body, including the heart and the arteries of the neck that transport blood to the brain. The embolus travels through the arteries, which branch off into smaller vessels. When it reaches a point where it can go no further, it plugs the vessel and cuts off the blood supply to the area of the brain that is supplied by that vessel.

Note: Both thrombotic and embolic strokes are referred to as ischemic because the blood supply has been blocked to the brain area. You may hear of the term cerebral infarction in connection with thrombotic and embolic types of stroke. Cerebral refers to the brain. An infarct is an area of tissue death due to a blockage of blood flows, such as a blood clot. It is also a result of ischemia, which refers to an inadequate blood (and therefore oxygen) supply to a certain part of the body.

3. Blood flow decreases to the brain which can result from poor overall blood flow in the body due to heart damage or dysrhythmia (irregular heart rhythm that makes pumping inefficient or ineffective). This type of ischemic stroke is called hypoperfusion or watershed and is less common than the other two types.
**Hemorrhagic Stroke**

The second main type of stroke is hemorrhagic and occurs when a blood vessel in or around the brain ruptures or leaks. This rupture not only denies the blood from reaching its destination, it also causes a leakage of blood into the brain or the area surrounding the brain. When this happens, the cells nourished by the artery are unable to obtain their normal supply of nutrients and stop functioning properly. Blood begins to accumulate and clot soon after the rupture of the artery, causing a disruption of brain function and potentially increased pressure on the brain itself. Cerebral hemorrhage is most likely to occur in people who suffer from a combination of atherosclerosis and high blood pressure.

**Transient Ischemic Attack (TIA)**

About one-third of all strokes are preceded by one or more transient ischemic attacks (TIAs) or what are sometimes referred to as “mini-strokes.” TIAs can occur days, weeks, or even months before a stroke and are caused by temporary interruptions in the blood supply to the brain. The symptoms resemble those of a stroke, but last a relatively short time and completely resolve.

Because TIAs are temporary, it is easy to ignore them or to believe the problem has disappeared. However, the underlying problem that caused the TIA continues to exist. Therefore, attention must be paid to these symptoms and a TIA should be viewed as early warning of a potentially serious stroke in the future.

If you or someone you know experiences a TIA, it is important to seek the assistance of a health care professional. Call your doctor immediately or go to the closest emergency department, even if the symptoms seem to be getting better or have resolved.
Neurologists have a saying when it comes to stroke treatment: “Time is Brain.” Like a heart attack, the key to good stroke treatment is early and rapid evaluation. In the last decade, we have seen amazing advances in the treatment of stroke, but most of these treatments can only be given in the first few hours. As such, I cannot emphasize enough the most important factor: Get to the hospital as soon as possible! If you suspect someone is having a stroke, do not wait, call an ambulance right away. Do not attempt to drive the person (or yourself) to the hospital. Try to note the time that the person’s symptoms began. When they arrive, tell the paramedics what happened, including the time, and any medical history you may know. If you are not the patient, follow the ambulance to the hospital (if possible), as the doctors may want to speak with you as well.

The focus in the emergency room will be on two things: determining if the patient is having a stroke, and then determining the appropriate treatment. If a stroke is felt likely, the next step is to find out if it is an ischemic (blockage) or hemorrhagic (bleeding) type of stroke. They will then use that information to determine how to treat that stroke. To get this information, the doctors and nurses will likely perform a series of procedures and tests in a very quick and efficient manner:

- A physician will ask about the symptoms and any recent medical problems
- An emergency room physician and likely a neurologist will look for signs of stroke on a physical examination
- Blood will be drawn for certain laboratory tests
- A CT scan (a type of X-ray) will be done to look for any signs of bleeding or early signs of the stroke

If there is bleeding found on the CT scan, treatment will likely consist of blood pressure control and watching closely for complications. They may call a neurosurgeon as well, although this is usually a precaution and most patients will not require any sort of surgery. They will admit the patient to the hospital so a close watch can be kept and any problems can be treated early.

If there is no bleeding and a blockage-type stroke is suspected, the next step will be to determine if the person is a candidate for therapy with a “clot-buster” drug, usually a medication called tissue plasminogen activator, or t-PA for short. This medication is designed to help break up the clot that is blocking blood flow to the brain, and therefore improve the chances of a good recovery. While it does not usually improve things right away, it has been shown that patients who receive this medication have less long-term problems from their stroke.

The medication does have some risk, however, and a small number of patients who receive the medication have bleeding problems that can actually make things worse. The physicians therefore have a list of things they look for to identify who would be less likely to have bleeding problems and more likely to benefit. The most important factor in this decision is the time since the stroke began. They will try to find out when the last time was that the patient was without symptoms. If the problems have been present for more than 4 1/2 hours, the risk of giving the medication will be too high. That is one of the reasons why it is very important to get to the emergency room as soon as possible. Patients on warfarin (Coumadin) (a strong blood thinner medication) are also at a higher risk of bleeding and in general will not be given the medication. Finally,
patients who are already showing improvement are usually not given t-PA, as they are more likely to do well even without the medication.

No matter what type of stroke or what happens in the emergency room, the patient will almost certainly be admitted to the hospital for further testing and to keep a close watch for problems.

Remember, stroke is a true emergency and time is the key. If you or someone around you may be having a stroke, please do not delay. Call an ambulance and seek treatment immediately!

**FACTS AND FIGURES**

...in the United States:

- On average, every 40 seconds, someone has a stroke.²
- On average, every 4 minutes, someone dies of a stroke.²
- Stroke is one of the leading causes of adult disability.¹
- An estimated 7,000,000 adults have had a stroke.²
- Over 15,000 living Delaware adults report having had a stroke.¹
- Stroke is the third leading cause of death.¹
- Each year, about 55,000 more women than men have a stroke.²
- Smoking more than doubles your risk of stroke.²
- African-Americans’ risk of a first stroke is almost twice that of Caucasians.²
- Approximately 500,000 people suffer their first stroke every year and 200,000 more experience recurrent strokes.¹
- 14% of people who survive a first stroke or TIA will have another within one year.¹
- It is estimated that Americans paid over $70 billion in 2010 for stroke-related medical costs and disability.³


The most common type of stroke is caused by the lack of a blood supply to one or more vessels of the brain. A stroke is more likely to occur after the age of 50, but can even develop in children. It is often associated with a history of high blood pressure (hypertension), and/or a disturbance of the blood lipids (most commonly) measured by the level of cholesterol in the blood. Those lipids develop into plaques that can slowly grow to obstruct one of the main arteries to the brain, and/or within one of the smaller end arteries to a localized area of the brain. These smaller arteries in the brain are called “end arteries” because they lack the rich capillary network found in most other parts of the body. An obstruction of one of these small end arteries can cause damage to a specific part of the brain such as speech or control of an arm.

Bleeding from a leak in one or more brain blood vessels can frequently be related to a small “bubble” called an aneurysm of a blood vessel which may be inherited. It may rupture at any age but more commonly after 50 years of age. Some may never leak. High blood pressures may be a factor. A brain tumor -whether a primary or secondary cancer starting in another part of the body- can also cause a stroke like attack.

Brain Attack/Stroke Risk Factors:

High blood pressures, increased weight (obesity), elevated cholesterol, increased blood sugars (diabetes), use of tobacco, excessive alcohol consumption and recreational drug use such as cocaine and amphetamines. The presence of multiple risk factors increases stroke risk. It is extremely important to keep the blood pressure under control. That is usually possible by taking prescribed blood pressure medications, avoiding salt, exercising and having the blood pressure checked regularly.

The Surgeon General reported a few years ago that approximately 300,000 Americans die each year from illnesses related to obesity. 60% of adults are overweight and childhood obesity is an epidemic.

People using warfarin (Coumadin) for an irregular heart rate called atrial fibrillation need to have their blood tests carefully and frequently checked to prevent bleeding. Hitting one’s head when falling is responsible for 24% of bleeding in the brain in older individuals (called intracranial hemorrhage).

Healthy Lifestyles

Adopting a healthy lifestyles can not only reduce the risk of a stroke, but of many other diseases. A diet low in saturated fats, excessive sodium (salt), and sugar has been shown to help prevent stroke and heart disease. Likewise the importance of 30 minutes of physical exercise at least 3 times per week has been scientifically shown to be an effective way to maintain a healthy life. Everyone should avoid smoking, exposure to second hand smoke, recreational drugs of all kinds and drinking more than two alcoholic beverages in anyone day.

Annual Physical Exams and Medical Follow-up

Everyone should have regular check ups by their primary health care provider as is appropriate for their age and gender. It is important to monitor weight, blood pressures, and overall health.
pressure, blood cholesterol and blood sugar. In addition to stroke risk factors, having mamograms, Pap smears and colonoscopy as recommended can help catch cancers early.

**Take Action When Symptoms Occur! If you or someone with you experiences:**

Sudden weakness or numbness  
Sudden change in vision  
Sudden difficulty in speaking  
Sudden dizziness or severe headache

**Call 911 immediately!**

Do not wait for such symptoms to go away. It is very important to get to the hospital immediately when stroke symptoms begin. This can help limit injury and improve recovery from a stroke/brain attack.
Stroke patients are often admitted to specialized sections of the hospital where they can be monitored closely. If the patient has received T.P.A., the clot dissolving medicine, they will spend the first day in the intensive care unit (I.C.U.). Often they wear leads on their chests to monitor the electrical activity of their hearts. To make sure the injured part of the brain receives a rich supply of oxygen, it is frequently supplied to stroke patients by nasal tubes or a mask. Most patients are given fluids through tubes in their veins to help prevent dehydration. Nurses will check their neurological status frequently to make sure the symptoms of stroke are not worsening. The stroke patient may not be given anything to eat or drink until they are seen by a speech therapist. This is to make sure they can safely swallow and do not choke or have food or drink go into their lungs and cause an infection. Patients may be instructed not to get out of bed and to lie flat for the first 24 hours after they suffer a stroke. After that they may be told to only get out of bed with help since balance problems are common with stroke and can lead to falls. One of the problems that can occur after a stroke is the development of blood clots in the legs. This happens because of lying in bed and being unable to move one side of the body. To prevent this, some patients will be given injections of low doses of a blood thinner or fitted with air powered compression stockings. A catheter tube may be temporarily used to help drain the bladder of stroke patients immediately after admission to the hospital.

The first day in the hospital for stroke patients in often filled with testing. They may have a computerized tomography (C.T.) picture of their brain made if it was not done in the emergency room. A magnetic resonance imaging (M.R.I.) scan of their brain may be performed. At the same a M.R angiogram (M.R.A.) picture of the blood vessels supplying the brain may be made. The blood vessels in the neck can be investigated with a carotid ultrasound. Because a blood clot coming from the heart is a common cause of stroke, sound wave pictures of the heart may be ordered. Sound waves can be bounced off the heart from the chest (trans-thoracic echocardiogram) or from a probe placed in the swallowing tube (trans-esophageal echocardiogram or T.E.E.). Blood tests are often taken during the first few days in the hospital. If a blood thinner is used to prevent stroke, it may be necessary to do blood tests more than once a day. Most tests are done to find out what caused the stroke and help doctors prevent any more strokes.

Usually within 48 hours of entering the hospital the stroke patient is evaluated by a number of therapists. These include speech therapists who help evaluate and treat problems with talking and swallowing. Physical therapists help patients recover the strength in their arms and legs and improve their ability to balance and walk. Occupational therapy helps patients with skills needed to take care of themselves, such as feeding, cleaning, dressing and bathing. Patients may be evaluated by a physiatrist, which is a doctor who specializes in rehabilitation. The physiatrist will help determine where the stroke patient should go to continue rehabilitation after leaving the hospital. If the patient has minor problems, they may go home. If they have more severe problems, they may go to a rehabilitation hospital or a nursing home (also called an extended care facility). Most extended care facilities offer speech, physical and occupational therapy. Stroke patients are usually evaluated by social workers and discharge planning nurses, who work with the doctors to help decide what is the best place for the patient to go when they leave the hospital. Most stroke patients leave the hospital 3-7 days after they had their stroke.
Atrial fibrillation is an irregular heart rhythm where the top chambers of the heart (atria) quiver. Normally these chambers beat in sequence with the lower parts of the heart (ventricles). This quivering or fibrillating does not allow for complete emptying of the upper chambers. Without complete emptying the blood can pool and this increases the risk of blood clot formation. The blood clots can then break loose and travel into the brain, lungs and other parts of the body. The blood clot that travels to the brain can cause a stroke because it will block circulation to that part of the brain.

The biggest danger of atrial fibrillation is stroke. Atrial fibrillation is found in 2.2 million Americans. Atrial fibrillation is responsible for 140,000 strokes annually, which is about 25% of all strokes. If you have atrial fibrillation, you can greatly decrease your risk for stroke with appropriate treatment.

Some people may have atrial fibrillation and not know it. Others may start to feel tired and a little unwell, while others my feel acutely ill. Atrial fibrillation may cause the heart to beat very fast which can be life threatening and slowing down the heart is a important to prevent heart failure.

The goals of treating atrial fibrillation are to convert to a normal rhythm and to prevent clot formation. Converting to a normal rhythm is not always possible, so preventing the blood from clotting while remaining in atrial fibrillation, is an important part of therapy. Medications can be used to slow down the heart rate, stop atrial fibrillation and to keep the blood from clotting. When medications are not successful, there are several different treatments to try to convert the rhythm. These include electrical cardioversion, radiofrequency ablation and/or surgery.

In electrical cardioversion, sedation is given, and then an electric shock is delivered to the heart to restore normal heart rhythm.

In radiofrequency ablation, a thin flexible catheter is inserted through a blood vessel and guided to the heart muscle. Sophisticated equipment is then used to determine the exact area of the heart that is causing the abnormal electrical responses that are causing the atrial fibrillation. Once identified, this tissue is then altered using radiofrequency energy to stop the abnormal stimulus which causes the atrial fibrillation.

Surgery can also be used to destroy the abnormal electrical pathways that cause atrial fibrillation. “Maze” is a surgical procedure where a heart surgeon makes multiple cuts into the atria in a Maze type pattern. The scars created from these cuts do not conduct electrical energy so the abnormal electrical impulses which caused atrial fibrillation do not spread through the atria. This helps prevent atrial fibrillation and restores a normal rhythm.

The most common place for clot formation in the atria is an area called the left atrial appendage. Anticoagulation medications can be given to prevent clot formation in this area. New procedures and devices such as the Watchman Device and the Lariat II are being used to close off this appendage and are showing success in preventing clot formation.

To prevent blood clot formation, anticoagulant and antiplatelet medications make the blood less prone to clotting. Warfarin (Coumadin) and Pradaxa (dabigatran) are the anticoagulants most often used. Aspirin and Plavix (clopidogrel) are the antiplatelet drug most often used. Antiplatelets medications are not as effective as anticoagulants in preventing stroke, but have a lower risk of bleeding complications. Long-term use of warfarin in patients with atrial fibrillation and other stroke risk factors can reduce stroke by 68 percent.
A stroke caused by atrial fibrillation is often worse than other causes of stroke. It is therefore very important that patients with atrial fibrillation get treatment.

References and Further information on Atrial Fibrillation:

http://www.a-fib.com/Overview.htm

http://www.mayoclinic.org/maze-heart-surgery/

http://www.strokeassociation.org/STROKEORG/LifeAfterStroke/HealthyLivingAfterStroke/UnderstandingRiskyConditions/When-the-Beat-is-Off---Atrial-Fibrillation_UCM_310782_Article.jsp
MY EXPERIENCE WITH STROKE

Bruce Casales

It was Friday about 4:00 pm when I got the worst headache ever. Of course I totally ignored it (denial is a powerful thing). My wife and I went to dinner (tried to mask the slurring) and went home. The next day I didn’t feel good (the stroke was getting worse). My wife took me to the hospital but they weren’t sure if I had a stroke.

They found out I had a hemorrhage stroke. A week later I had a ischemic stroke also. I had severe short term memory loss, couldn’t read, write, walk, plus it turns out, for 2 year, I couldn’t talk. I was in the hospital for 2 months.

I always felt that I would get better. Now, did I know that? No.....but I did work on it. At the rehab hospital I was in it was 5 days a week of speech therapy, physical therapy, and occupational therapy. Another 2 months. I spent 4 months of my life (and my wife’s) there and I went home.

Now the real work got started. Fortunately, I had my wife to help. She did everything for me. She was my friend, caregiver and advocate. I was lucky. A lot of people are not so lucky. Don’t do what I did...prevention is the real key. Know the signs:

- WALK (Is your balance off?)
- TALK (Is your speech slurred or face droopy?)
- REACH (Is your vision all or partly lost?)
- FEEL (Is your headache severe?)

If you not sure...don’t go to the hospital.....call 911 NOW!

Now, 9 years later I can do pretty much everything I used to do. The downside: I wasted 9 years of my (and my wife’s) lives.

That’s why support groups are so important. It’s a place to talk to other people who had the same experience as you. How they dealt with different things...education ...and not feeling I’m the only one had to deal with this.

When I was in the hospital, the golden rule was: 6 months...if the person got better fine, if not, that’s it. Now doctors know when a person has a stroke they will continue to get better for their rest of the lives. It’s not the end of the line...it’s the beginning...it’s about hope.
Physical therapy (PT) after a stroke aims to help the stroke survivor to regain skills that were lost when part of the brain is damaged. The degree of disability that follows a stroke depends upon which area of the brain is damaged. The physical therapist will usually focus on helping the patient in regaining strength, balance, coordination and the ability to move and walk. Physical therapy cannot “cure” or reverse the brain damage, which was caused by the stroke. Participation with an early physical therapy program can, however, help the patient to achieve the best level of recovery possible.

PT in the acute care hospital begins as soon as the patient is medically stable, often in the first or second day of admission. If stable, the patient will be assisted out of bed to a chair. Patients progress from sitting to standing, to transferring and walking with physical therapy. Exercises may involve teaching the stroke patient how to coordinate leg movements, how to regain balance, or walking with an assistive device. Physical therapy sessions may also include reviewing good safety practices, or involving the patient’s family to teach them how to help assist the patient.

As the time for discharge from the acute care hospital approaches, the staff will work with the patient and family to decide which type of rehabilitation will be best suited for the patient. This depends on many factors: if the patient lives alone or how much help is available to the patient at home, how safe the patient is when moving or walking, and how much therapy and activity the patient is able to tolerate. The rehabilitation options after discharge include:

- Outpatient therapy - usually 2-3 times per week
- Home care therapy - this would involve a therapist coming to your house, usually 2-3 times per week
- Sub-acute inpatient rehabilitation - this therapy is usually provided in a nursing home, 3-5 days per week, for approximately 1 hour per day, with a goal of the patient returning to home.
- Acute inpatient rehabilitation - this therapy is usually provided in a rehabilitation hospital, 5-7 days per week, for approximately 3 hours per day.
The primary goal of Occupation therapy (OT) in the treatment of patients who have had a stroke is to increase their independence with activities of daily living (ADL’s). In acute care, this would focus on assisting patients with the ability to dress and bathe themselves. Initially, this involves training patients in compensatory techniques to complete these activities as patients may have weakness on one side, balance deficits or visual deficits. Adapted equipment may also be issued for feeding or dressing if this increases independence.

OT also focuses on the use of the arms and hands. Since strokes often cause weakness or incoordination on one side of the body, treatment may include range of motion exercises, strengthening or coordination activities on the affected side. Additionally, OT may provide braces or splints for the affected limb to prevent contractures (if needed).

OT may also evaluate visual and perceptual skills as patients may have visual deficits after a stroke. These deficits may include not being able to see one side, “forgetting” about one side or double vision. Treatment includes retraining visual skills as well as compensating for deficits.
After a stroke, a person may experience language deficits and swallowing difficulties. Other impairments may include slurred speech, voice disorders and cognitive deficits. The severity of these may vary depending on the location and size of the damage caused by a stroke. A speech therapist (ST) is a health care professional who specializes in assessing and treating communication disorders and swallowing problems.

When a patient is medically stable and cleared by the physician, the rehabilitation process begins. Early intervention with a stroke patient is crucial to obtaining the greatest recovery potential from therapy services. A speech therapist is part of rehabilitation team which includes physical therapists (PT) and occupational therapists (OT). This team is responsible for helping the patient regain as much lost function as possible.

In an acute care setting, a speech and swallowing therapist is consulted by the physician when the patient exhibits difficulty with talking and/or eating meals. A speech and swallowing evaluation is completed. The result of this evaluation determines the strengths and weaknesses of the patient and guides the development of an individualized rehabilitation program. This plan may include compensation strategies and strengthening exercises to assist the patient to improve their communication and swallowing function.

An emphasis is applied to the family’s education so that there is continuity with therapy strategies and exercises. Handouts are given to patients so that they can continue with their therapy daily.

Therapy does not end when the patient is transferred to another facility or discharged home. Rehabilitation services are available in a rehab hospital, nursing home or extended care facility. Home care services provide a therapy setting in your own house. If the patient requires further therapy then outpatient clinics will provide for their needs.

Terms commonly used in speech therapy:

**Aphasia** – A difficulty producing and processing language. One example is when the patient states, “I know what it is, but I can’t say it,” when trying to identify an object.

**Apraxia** – The inability to coordinate (planning, sequencing) the muscles involved in speech production.

**Dysarthria** – A weakness in the muscles involved in the speech mechanism. This is often described as having slurred speech.

**Cognitive deficits** – These impairments affect the ability of an individual to think and process information. This may include memory, sequencing and problem solving.

**Dysphagia** – A weakness in the muscles that are involved with swallowing.

**Dysphonia** – The inability to produce voiced sounds in speech.
When someone suffers a stroke a portion of the brain becomes damaged. Since the brain is the command center of the human body, a stroke can affect the signals coming from the brain. The brain controls all aspects of the person, from the physical to emotional aspects. Functions that can be affected by stroke can include reading, writing, walking, talking, thinking, and seeing as well as the memories we form and our moods. Having a stroke has the potential to affect and change any part of who we are and result in problems with intellectual abilities, emotions and personality, in addition to the physical disabilities.

Speech and Language:

Some stroke survivors can have problems with speech and language. This can make it difficult to communicate with others which can become very frustrating. After a stroke, one can have difficulty naming objects correctly, expressing themselves or even comprehending what others are saying. Some people may also experience problems in related skills such as math, reading or writing. This does not mean these skills are lost forever. Many times with speech and language therapy these skills can be relearned or alternate ways of communication are formed.

Memory:

Memory, especially short-term memory, can be affected by a stroke. One may not be able to retain what has just happened 5 minutes ago or one may not be able to retrieve memories from the past. Strokes can affect verbal memory, such as naming items on a shopping list or visual memory, such as recall for faces. A stroke can cause problems with recalling information, but that does not mean these skills cannot be re-learned.

Visio-perceptual Skills:

A stroke can affect one’s ability to pay attention to one side of one’s physical space or visual field. Even though there may not be problems with one’s eyesight, the visual field loss may cause a person to bump into walls while walking or trip on objects in the walking path. Sometimes this neglect of space can be so severe the person may deny that a body part even belongs to them or will not use one side of the body despite no actual loss of physical ability. There can also be difficulty with solving problems such as puzzles or drawing. If there is a problem with the visual system, a stroke can also cause problems with reading. Physical and occupational therapy are terrific sources to help compensate for one-sided neglect or eyesight issues.

Emotional functioning:

Patients can develop emotional problems after a stroke such as depression and mood swings. Depression often goes undiagnosed and untreated. Some of the symptoms of depression include: persistent sadness, anxiousness or “empty mood”, feelings of hopelessness, guilt, worthlessness, decreased energy, fatigue, difficulty concentrating, insomnia or excessive sleepiness, appetite changes, or thoughts of suicide. If these symptoms are present, seek an evaluation from a medical practitioner. Social workers, pastoral services, physicians, and other counseling services are available and offer insight and help with these symptoms.

Personality Changes:

Personality changes can also occur after stroke. Some common changes that may happen are doing things without thinking, social inappropriateness, impulsiveness, or a lack of interest in activities. Communication with loved ones is key – making sure everyone knows that these behaviors can occur after a stroke may make it easier to seek help if needed.

The most important thing to remember is that, although having a stroke may change many aspects of your daily life, these changes can be overcome in time.
A brain attack or stroke can have a devastating effect on the patient as well as his/her family. Movement and, sometimes, cognitive functions that were once performed automatically now require great effort and new strategies, if they can be performed at all. The patient’s family is often torn between sympathy combined with the compulsion to do as much as possible for the patient and anger at the additional burden this tragedy brings to their own lives.

In the early stages following a stroke, the patient is often bewildered by the sudden loss of even the most basic functions. As initial recovery progresses, he/she becomes understandably torn between the expectation that full recovery is only a matter of time and the frequent reality that some functional deficit is likely inevitable. What can the patient expect from rehabilitation?

Immediately after the stroke, the focus of the medical staff is to medically stabilize the patient. At this stage, physical therapy (PT) consists largely of attempts to prevent the loss of joint motion that can occur due to tightening of muscles and ligaments that are not moved through their full available range. Early exercise also helps to minimize the loss of muscle strength that occurs with disuse of the limb. As soon as the patient’s medical condition has stabilized, however, aggressive therapy becomes an essential ingredient to promote the patient’s long-term recovery.

Rehabilitation. Because of time limitations resulting from the rising cost of health care, initial rehabilitation often emphasizes teaching the patient to compensate for the loss of control of the extremities on the side affected by the stroke. Although recovery of function is of greatest importance following a stroke, it is important for clinicians not to be short sighted about the long-term implications’ of neglecting the patient’s most affected side. Failure to help the patient develop strategies that actively and appropriately incorporate the affected extremities into daily tasks often leads to a greater risk of falls and other accidents because the patient has no practice in controlling the impaired side of the body. Moreover, an aspect of rehabilitation that is often neglected is control of the trunk. The trunk is essential for postural stability in sitting and standing, serves as a base of support from which the arms and legs are able to work, and allows extension of the functional use of our extremities when objects are beyond our typical reach length. Thus, coordinated function of the trunk with the extremities is an essential aspect of rehabilitation that should not be neglected.

Although a course of inpatient rehabilitation is typically shorter today than in the past, most patients receive some form or continued therapy after discharge, either as an outpatient or with the guidance of a home health therapist. This additional therapy provides an important opportunity to address control issues of the trunk and the extremities affected by the stroke. Unfortunately, an important window of opportunity may have already closed by this time if early rehabilitation focused solely on learning compensations for the affected extremities. Thus, early treatment aimed at getting the patient functional enough for discharge must be tempered by an understanding of the need to foster use of the most affected side of the body as much as possible.

Guidelines for improving motor skill. A number of implications for rehabilitation come from recent studies of the brain’s ability to recover function after a lesion. Some important lessons follow:

1. Begin practice as soon as possible following a stroke (i.e., once the patient is stable medically).

2. Treatment should emphasize the practice of functional skills that incorporate use of affected extremities as much as possible.
3. Treatment should challenge the patient’s abilities, within appropriate limits of other medical conditions/contraindications and the need to ensure safety.

4. Treatment should vary as many aspects of a task’s practice as possible (e.g., the size, shape, texture and weight of objects being manipulated) and should allow the patient opportunities to self-evaluate their performance so that they do not become dependent on outside assessment.

5. Feedback is important for learning. Providing external feedback too frequently, however, can be detrimental to learning.

6. Extensive practice is essential for recovery of function. The amount of practice available in most therapy sessions is not adequate to maximize functional recovery. Patients must engage in frequent and quality practice of skills outside of formal therapy if recovery is going to be optimal.

Newer Therapies for Stroke Rehabilitation: In recent years, a number of therapeutic approaches have been introduced to help re-train movement function in persons following a stroke. Examples of more commonly used clinical approaches to rehabilitation include Constraint-Induced Movement Training (CIMT) and Body-weight supported treadmill training (BWSTT). CIMT, in particular, is based on point #6 above. Participants agree to keep their non-impaired upper extremity in a splint while intensively practicing functional tasks with their impaired extremity. Treatment is both intense and short-term, typically lasting 6-hours per day for about two weeks, although modified versions have been recently implemented in some clinics. CIMT was developed to improve arm function, although a variant of the approach also has been applied to train walking post-stroke.

BWSTT attempts to improve a patient’s confidence in bearing weight on the affected leg by providing partial body weight support while the patient walks on a treadmill. The support is maximal at first and then gradually decreased to no additional support over a number of treatment sessions. In addition, it is useful to increase the treadmill speed to help the patient gain confidence walking at faster speeds.

More recent experimental innovations introduced in recent years include Robotic Assisted Training (RAT), either applied to improve arm function or walking ability, Split-Belt Treadmill Training (SBTT) and Fast-FES Treadmill Training (FFTT) for walking. FFTT involves practice of walking at higher than normal speeds while functional electrical stimulation (FES) is applied to the ankle muscles to assist their contraction. SBTT attempts to help the subject learn to bear weight for equal time periods on both the impaired and non-impaired legs. RAT uses computer-controlled robots to assist or resist movement of the arm or leg while patients attempt to perform functional tasks. None of these approaches are in standard use clinically but have potential to improve function in persons post-stroke. Most insurance companies do not pay for these latter treatments because they are still considered experimental. However, variants of all three are currently under study at the University of Delaware Department of Physical Therapy and volunteers are currently being enrolled for trial therapy with them.

Some treatments like CIMT have been shown to be effective only in individuals with mild impairment of their hand function. Patients with more significant impairments of their arm and hand would not qualify for this therapeutic approach at the present time. Thus, while these and a number of related treatments not mentioned here provide hope for the stroke survivor, it is still too early to know how widely useful they will be.

Local Rehabilitation Studies. As mentioned above, the Department of Physical Therapy at the University of Delaware is engaged in a number of ongoing research projects aimed at better understanding functional losses after a stroke and to develop improved treatment methods. For further information on how you can become involved in this research, please contact Ruby, our research scheduling coordinator, at (302) 831-0150 or UDPTResearch@udel.edu.
Nine years ago my husband Bruce had two strokes. These left him in pretty bad shape. He couldn’t walk, talk, read, or write. He was unable to do small tasks for himself like getting dressed or taking care of his personal hygiene.

I was so scared! I was overwhelmed trying to deal with so much. The shock of a life-changing event, the near loss of my husband, overseeing his hospital care, dealing with the insurance company and our financial situation, and realizing that our lives would never be the same again. I was just worn out dealing with the day to day life I now led.

Once Bruce had been stabilized and had received four months of rehab it was time for him to come home. Now there was a whole new set of things to be afraid of. I was afraid I would not be up to caring for him, I might mess up all the medications he took, and he might have another stroke. I was also afraid of some of the effects of his stroke. I wasn’t sure how I would get along with this stranger.

In the coming days I was sleep deprived, overworked, frustrated, stressed, and just plain worn out. I remember one afternoon Bruce and I just sat at the kitchen table and cried. I was at the end of my rope.

I decided to attend a meeting of a support group recommended by the rehab hospital. It was one of the best things I have ever done for myself and Bruce. The group was for caregivers of stroke survivors. Just being there with people who in the past had been through the same thing as I made me realize that there can be a life after stroke. They helped me become realistic about the fact that life would never be the same as before, but things would get easier with time. We talked about stroke survivors and caretaking and it was a relief to know I was not alone. It was nice to hear that some others had times when they were angry with the survivor and that was okay. We talked about insurance and therapy and about friends who never came around anymore. We talked about depression. We talked about the best way to bathe someone who couldn’t do it themselves. We talked, we laughed, we cried, we supported each other. We were all in the same boat and I wasn’t so frightened anymore. I thought, “I know this is going to be hard but maybe, I CAN do it.”

I urge anyone dealing with stroke to search out a support group. This may be hard for the stroke survivor who is still trying to deal with new limitations, depression, and embarrassment over his or her condition but it really helps to talk to someone who has walked in your shoes and had those same feelings.

This stroke may be one of the most frightening things in your lives. Considering that it is a blessing that there are people out there who have been through it and are willing to help you. Don’t be afraid to lean on others for help. You are not alone.
My life was quite busy – I had a fantastic job, was caring for my Mom and dealing with the recent death of my Father who suffered a stroke. My husband and I were raising our 16 year-old son and dealing with the holiday festivities. It was December 30, 2002 – I woke up on a Monday morning to begin my normal workweek. I felt listless and tired and thought maybe I was coming down with the flu. Like most working women, I moved forward and left for work – things, however, were about to change!

Once at work, I became even more listless - I experienced memory loss and had trouble forming words. I called my husband and had him pick me up and take me home. I was only home for a few hours when my son noticed that I was not improving, but seemed to be getting worse. He and my husband took me to the hospital. At the age of 45, with high cholesterol, family history of stroke, and taking an oral contraceptive ... I was suffering a stroke!

After 7 days in the hospital, 12 weeks of physical, speech and occupational therapy, and an overwhelming network of support from my family and friends, I went back to work. I have some residual short-term memory loss but overall, I am very lucky. What did I learn? You’re never too young to suffer a stroke.

"At the age of 45, with high cholesterol, family history of stroke, and taking an oral contraceptive ... I was suffering a stroke!"

More women die each year from a stroke than die from breast cancer!

Understand your risk factors for stroke and discuss your medical history with your healthcare provider. Take a proactive approach to healthcare management and stroke prevention.

Recognize the warning signs and symptoms of a stroke . . . and most importantly, don’t ignore the warning signs and don’t wait! Call 911 for emergency medical attention.

As a member of the Delaware Stroke Initiative’s Board of Directors, I feel obligated to share my story and work to improve stroke prevention and awareness! Remember, you’re never too young to suffer the devastating effects of a stroke!

**Taking action can prevent a stroke!**

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Activities of Daily Living: abbreviated as ADL, include daily hygiene, such as bathing, showering, or washing; grooming, shaving, combing one’s hair or dressing; eating and drinking; and walking or standing for mobility.

Acute: a disease or condition that begins abruptly.

Advance Directive: A legal document (as a living will) signed by competent person to provide guidance for medical and health-care decisions (as the termination of life support or organ donation) in the event the person becomes incompetent to make such decisions.

Ambulation: the act of walking or moving with or without assistive devices.

Aphasia: a complete or partial loss of or impairment of the individual’s ability to use or understand language. It may be temporary or permanent: Expressive aphasia in which words cannot be formed or expressed, or Receptive aphasia in which language is not understood.

Atherosclerosis: a common abnormal condition that refers to the plaques or “hardened areas” along the inner walls of the arteries causing the blood vessel to become narrowed with reduced blood flow to the different regions of the brain. This condition is seen with aging and build up of lipids, cholesterol, proteins, and calcium that may create a risk for thrombosis. It is associated with use of tobacco, high blood pressure, obesity and other conditions that are risk factors for stroke.

Atrophy: a wasting or reduction in size, e.g., smaller muscles as a result of “disuse” or not using the muscles, diseases, or lack of physical exercise, or a reduction in the size of the brain due to the aging process or reduced blood flow over a long period of time.

Brain Stem: The part of the brain composed of the midbrain, pons, and medulla oblongata and connecting the spinal cord with the forebrain and cerebrum.

Bruit: an abnormal blowing or “swishing” sound or murmur heard while placing a stethoscope over the carotid artery. When the artery is approximately 70% blocked, a bruit may be heard by the experienced examiner. If the artery is almost totally blocked, there is usually no audible sound.

Carotid Artery: the major arteries on each side of the neck that are responsible for carrying a large amount of blood supply to the head and neck. A carotid “bruit” or murmur may be heard by using a stethoscope placed gently over the carotid artery that suggests an arterial narrowing.

Cerebral Embolism: a blood clot, or embolism that blocks a vessel in the brain and prevents oxygen and circulation to the areas beyond the clot.

Cerebral Hemorrhage: bleeding from a blood vessel in the brain that can lead to displacement or destruction of brain tissue.

Cerebral Thrombosis: a clotting of blood in any cerebral vessel that block flow to parts of the brain.
**Cholesterol**: a waxy lipid or fat-like substance that is produced by the body and found almost exclusively in foods of animal origin. Increased levels of low-density lipoprotein cholesterol may be associated with atherosclerosis, whereas higher levels of high-density lipoprotein cholesterol appear to lower the person’s risk for heart disease and stroke.

**Contracture**: an abnormal shortening of muscles or other soft tissue around a joint that may result in pain and discomfort and loss of function.

**CT Scan or Computed Tomography**: a radiographic diagnostic test that produces a film representing a detailed cross section of the head and brain (or other parts of the body). The procedure is a quick, safe, painless test that can be performed with or without contrast dye.

**Dementia**: a progressive organic mental state that may be characterized by personality changes, confusion and decreased intellectual capacity, memory, judgment and impulses.

**Diastolic Blood Pressure (DBP)**: the blood pressure in the arteries when the heart muscle is relaxed.

**Dysarthria**: difficulty with speech output due to muscle weakness or in coordination causing slurred speech.

**Dysphagia**: difficulty with swallowing.

**Edema**: the abnormal collection of fluid or swelling in the tissue spaces.

**Electrocardiogram (ECG of EKG)**: a graphic recording of the electrical heart activity.

**Electroencephalogram (EEG)**: a graphic chart that records the electrical impulses produced by the brain cells detected by placing electrodes on the scalp that provide information about neurological conditions, e.g., seizures.

**Endarterectomy**: the surgical removal of an abnormal plaque formation or deposit in the lining of an artery that has contributed to the narrowing of the artery and causing decreased blood flow to the brain.

**Flaccid**: weak, soft and flabby, e.g., an arm or leg that has no muscle tone that can occur following a brain attack.

**Gait**: the manner or style of walking. The normal gait has a swing phase and a stance phase for each lower limb that includes rhythm, cadence, and speed.

**Hemiparesis**: muscular weakness on one-half of the body. When caused by a brain attack, the weakness is on the opposite side of the body from the brain damage or brain attack.

**Hemorrhage**: loss of a large amount of blood when a vessel in the brain, for example, ruptures or bleeds.

**Hemiplegia**: paralysis on one-half of the body on the opposite side of the brain damage or brain attack.

**Hypertension**: the number one cause of a brain attack is an elevated blood pressure that exceeds the normal limits for an individual’s blood pressure.

**Incontinence**: the inability to control the bowel or bladder from emptying. The individual with incontinence may need to have a prescribed bower and bladder program.
Ischemia: a decreased supply of oxygenated blood to an organ.

Living Will: A document in which the signer requests to be allowed to die rather than be kept alive by artificial means if disabled beyond a reasonable expectation of recovery.

MRI (Magnetic Resonance Imaging): a noninvasive diagnostic study that uses radiofrequency radiation as its source to image areas of the body. The procedure is pain-free but may cause claustrophobia that can be relieved with appropriate medication.

Paresis: weakness of a muscle group that can occur following a brain attack. The partial loss of muscle power or sensation.

Paraplegia: paralysis that is characterized by motor and sensory loss in the legs and trunk on both sides of the body.

Physiatrist: a physician who specializes in physical medicine and rehabilitation who deals with problems following a brain attack: directs the rehabilitation team for long-term follow-up and home care for individuals with disabilities.

Rehabilitation: the restoration of an individual using therapies with the goal of maximizing independence or restoring the individual to their highest level of functioning after an illness.

Seizure: abnormal brain wave activity that can cause changes in behavior. A seizure may be clonic, tonic, focal or generalized and is usually diagnosed following a test, e.g., an EEG by a neurologist.

Spasticity: increased tension or tightness in a muscle that resists efforts to stretch. This condition can result in pain and discomfort, weakness, loss of function and independence that can require medications, therapy, or a surgical implantation of an intrathecal baclofen device for relief.

Systolic Blood Pressure (SBP): the pressure inside the arteries when the heart contracts with each beat.

Transient Ischemic Attack (TIA): described as a mini-stroke, it causes symptoms just like a brain attack but is transient lasting only a few minutes and completely reverses when the cerebral blood vessel that was temporarily blocked or was in a spasm resolves spontaneously. A TIA could be a warning sign of a serious cerebrovascular event and should be taken seriously.

Ventricles (Cerebral): small, fluid-filled cavities within the brain that are filled with cerebrospinal fluid (CSF) that is continuously being produced and circulating in the brain, to cushion and protect the brain.

Visual Field Defect (VFD): refers to impaired vision affecting the outer half of one eye and the inner half of the other eye and is similar to a “blind spot.” The loss is generally on the side that is paralyzed after a brain attack.

Vocational Rehabilitation: the process of retraining an individual to perform job-related activities after they have experienced a disability, such as a brain attack.
NATIONAL ORGANIZATIONS

Alliance for Aging Research
202/293-2856
http://www.agingresearch.org/
Independent, non-profit organization founded to promote medical research into conditions affecting human aging

Leading Age
202-783-2242
www.AAHSA.org
LeadingAge is an association of 5,400 not-for-profit organizations dedicated to expanding the world of possibilities for aging.

American Association of Retired Persons (AARP)
1-888-687-2277
www.aarp.org

AARP Delaware
1100 N. Market St
Suite 1201
Wilmington, DE 19801
866-227-7441
destate@aarp.org
Membership required (eligible at age 50). Provides health information brochures, supplemental medical insurance, financial investment program. Offers discounts on medications, lodging, and car rentals.

American Heart Association (AHA)
American Stroke Association
200 Continental Dr.
Suite 101
Newark, DE 19713
Phone: (302) 286-5723
www.americanheart.org
www.strokeassociation.org
The American Stroke Association is the division of the American Heart Association that is solely focused on reducing disability and death from stroke through research, education, fundraising and advocacy.

American Speech, Language and Hearing Association
2200 Research Blvd
Rockville, MD 20852
800-638-8255
www.asha.org

Augmentative and Alternative Communication – Rehabilitation Engineering Research Center on Communication Enhancement
http://aac-rerc.psu.edu/

Agency for Health Care Research and Quality
540 Gaither Rd
Suite 2000
Rockville, MD 20850
301-427-1104
www.ahrq.gov

Centers for Medicare and Medicaid Services (CMS)
1-800-MEDICARE
www.medicare.gov
Federal agency that administers Medicare (for elderly or disabled individuals) and Medicaid (for individuals with low income). Offers free publications and operates a telephone hotline/information service.

Gerontological Society of America
202-842-1275
www.geron.org
Multidisciplinary association that deals with research, practice, and education in aging.
National Association of Professional Geriatric Care Managers
520-881-8008
www.caremanager.org
Referral source for geriatric care managers nationwide.

National Committee to Preserve Social Security and Medicare
800-966-1935
http://ncpssm.org

National Council on Aging
202-479-1200
www.ncoa.org

National Institute on Aging
U.S. Dept. of Health and Human Services, Public Health Service, National Institutes of Health
301-496-1752 or 800-222-2225
www.nia.nih.gov
NIA conducts and supports research to increase knowledge of the aging process and associated physical, psychological, and social factors. Call for a list of publications.

National Library of Medicine
301-594-5983 or 888-FINDNLM
www.nlm.nih.gov

National Stroke Association
800-STROKES (787-6537)
www.stroke.org

National Aphasia Association
350 Seventh Ave
Suite 902
New York, NY 10001
800-922-4622
www.aphasia.org
An organization dedicated to promoting the care, welfare, and rehabilitation of those with aphasia through public education and support of research.

Easter Seals National Headquarters
233 S. Wacker Dr
Suite 2400
Chicago, IL 60606
800-221-6827
www.easterseals.com

National Health Information Center (NHIC)
US Dept. of Health and Human Services
301-565-4167 or 800-336-4797
www.health.gov/nhic/
Health information referral service.

National Rehabilitation Information Center
8201 Corporate Dr
Suite 600
Landover, MD 20785
800-346-2742
www.naric.com

National Institute of Neurological Disorders and Stroke (NINDS)
National Institute of Health
NIH Neurological Institute
PO Box 5801
Bethesda, MD 20824
800-352-9424
www.ninds.nih.gov

Smokefree.gov
1-800-QUIT-NOW
www.smokefree.gov is intended to help you or someone you care about quit smoking.

Social Security
920 W Basin Rd
Suite 200
New Castle, DE 19720
800-772-1213 (English and Spanish)
www.ssa.gov
STATE AND LOCAL ORGANIZATIONS

Alzheimer’s Association
2306 Kirkwood Hwy
Wilmington, DE 19805
www.alz.org
302-633-4420; Sussex: 302-854-9788; 800-272-3900

Architectural Accessibility Board
302-739-5644
www.dfm.delaware.gov

Delaware Assistive Technology Initiative (DATI)
DuPont Hospital
PO Box 269
Wilmington, DE 19899
302-651-6790 or 800-870-DATI
www.dati.org
DATI connects Delawareans who have disabilities with the tools they need in order to learn, work, play, and participate in community life safely and independently. DATI operates resource centers that offer training as well as no-cost equipment loans and demonstrations.

Delaware Division of Services for Aging and Adults with Physical Disabilities
Dept. of Health & Social Services
1901 N. DuPont Hwy
New Castle, DE 19720
800-223-9074
http://dhss.delaware.gov/dsaapd
Offers a “Guide to Services for Older Delawareans and Persons with Disabilities.”

Delaware Helpline
211 (in Delaware)
800-560-3372 (outside Delaware)
www.delaware211.org
This is a free service that provides information on state agencies and referrals to community resources.

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University of Delaware – Department of Physical Therapy
301 McKinly Laboratory
Newark, DE 19716
302-831-0150
Studies problems in movement coordination in individuals who have had a stroke and to identify more effective treatment approaches. Individuals who have had a stroke are encouraged to participate. Contact Ruby Carey, Stroke Studies Coordinator: racarey@udel.edu

Osher Lifelong Learning Institute at UD
2700 Pennsylvania Ave
Wilmington, DE 19806
302-573-4417
www.lifelonglearning.udel.edu

AARP Delaware
1100 N. Market St
Suite 1201
Wilmington, DE 19801
866-227-7441
delstate@aarp.org

Freedom Center for Independent Living
302-376-4399 or 866-OURFCIL
www.fcilde.org
The Freedom Center is a consumer-driven organization committed to promoting independent living options for individuals with disabilities.

www.HeartTruthDelaware.org
Provides free web-based professional education, statewide community resource directory for women with cardiovascular risk factors, patient education materials, websites and videos, updated clinical guidelines and clinical tools, schedule of local professional and community health events, and health new updates.

CARE DELAWARE:
CAREGIVER RESOURCE CENTERS

Staffed Resource Centers
Alexis Morris, Coordinator
Newark Senior Center
200 White Chapel Drive
Newark, DE 19713
(302) 737-2336 ext. 12
amorris@newarkseniorcenter.com

Patricia Anderson-Rice, Coordinator
Wilmington Senior Center
1901 N. Market Street
Wilmington, DE 19802
(302) 651-3420
pla_andersonrice@wilmingtonseniorcenter.org

Cindy Clark, Coordinator
Modern Maturity Center
1121 Forrest Avenue
Dover, DE 19904
(302) 734-1200 ext. 186
mmc_caregiver@hotmail.com

additional contact:
Cheryl Gallagher
(302) 734-1200 ext. 173
cherylgallager@modern-maturity.org

Kathleen Woolman, Coordinator
CHEER Community Center
20520 Sandhill Rd
Georgetown, DE 19947
(302) 854-2886
kwoolman@scss.org

Kathleen Woolman, Coordinator
Harbour Lights CHEER Center
34211 Woods Edge Drive
Lewes, DE 19958
(302) 645-9239 or (302) 854-2886
kwoolman@scss.org
Kathleen Woolman, Coordinator
Coastal Leisure Center
Ocean View CHEER Center
Cedar Neck Road
Ocean View, DE 19970
(302) 539-2671 or (302) 854-2886
kwoolman@scss.org

Kathleen Woolman, Coordinator
Pelican Cove
Long Neck CHEER Center
The Shoppes at Long Neck
26089 Long Neck Road
Millsboro, DE 19966
(302) 945-3551 or (302) 854-2886
kwoolman@scss.org

Non-Staffed Resource Centers:

Appoquinimink Community Library
118 Silver Lake Road
Middletown, DE 19709
(302) 376-4190

Bear Public Library
101 Governor’s Place
Bear, DE 19701
(302) 838-3300

Corbit-Calloway Memorial Library
2nd & High Street
Odessa, DE 19730
(302) 378-8838

Hockessin Public Library
1023 Valley Rd
Hockessin, DE 19707
(302) 239-0706

Howard Weston Senior Center
1 Bassett Ave
Manor Park
New Castle, DE 19720
(302) 328-6094

Kirkwood Highway Library
6000 Kirkwood Hwy
Wilmington, DE 19808
(302) 995-7662

Mid-County Senior Center
First Regiment Road
Wilmington, DE 19808
(302) 995-6555

St. Anthony’s Senior Center
1703 W. 10th St. (1st. Floor)
Wilmington, DE 19805
(302) 421-3735

Women’s Resource Center
800 N. Walnut St
Wilmington, DE 19801
(302) 654-3103

Senior Companion Program
First State Community Action Agency
Stanford L. Bratton Building
308 North Railroad Ave
Georgetown, DE 19947
(800) 372-2240

Delmar Public Library
101 N. Bi-State Blvd
Delmar, DE 19940
(302) 846-9894

Greenwood Public Library
Mill Street
Greenwood, DE 19950
(302) 349-5309

Laurel Senior Center
P.O. Box 64
13 N. Central Ave
Laurel, DE 19956
(302) 875-2536

Milford Senior Center
111 Park Avenue
Milford, DE 19963
(302) 422-3385

Milton Public Library
121 Union Street
Milton, DE 19968
(302) 684-8856

Millsboro Public Library
203 Main Street
Millsboro, DE 19966
(302) 934-8743
Adult day care centers offer a safe and caring environment for adults who need supervision or assistance and might not be safe or actively engaged if left at home, but who do not require 24-hour institutional care. Most adult day care centers provide transportation.

National Adult Day Services Association
www.nadsa.org

Active Day of Newark
200 White Chapel Drive, Newark, DE 19713
Newark, DE 19713
Phone: (302) 533-3543

Christiana Care Adult Day Program at Riverside
700 Lea Blvd., Main Bldg., 1st Floor
Wilmington, DE 19802
Phone: (302) 765-4175

Easter Seals
61 Corporate Circle
New Castle, DE 19720
Phone: (302) 324-4444
www.de.easterseals.com

Easter Seals Delaware & MD’s Eastern Shore, Inc
22317 DuPont Boulevard
Georgetown, DE 19947
Phone: (302) 856-7364

Elwyn Delaware
321 E. 11th Street
Wilmington, DE 19801
Phone: (302) 658-8860 or (302) 657-5607
www.elwyn.org

Evergreen Center I: Alzheimer’s Adult Day Care
3000 Newport Gap Pike, Bldg. F
Wilmington, DE 19808
Phone: (302) 995-8448

Evergreen Center II: Alzheimer’s Adult Day Care
611 S. DuPont Hwy.
Milford, DE 19963
Phone: (302) 422-1575
Fax: (302) 422-7136

Gilpin Hall Adult Day Program
1101 Gilpin Ave
Wilmington, DE 19806
Phone: (302) 654-4486

Gull House Adult Activity Center
38149 Terrace Rd.
Rehoboth Beach, DE 19971
Phone: (302) 226-2160

Laurel Senior Center, Inc./Laurel Adult Care
113 N. Central Ave., P O Box 64
Laurel, DE 19956
Phone: (302) 875-2301 or (302)875-2536

Modern Maturity Center, Inc./Daybreak Mature Adult Care
1121 Forest Ave.
Dover, DE 19904
Phone: (302) 734-1200

New Horizons Adult Care
100 Sunnyside Rd.
Smyrna, DE 19977
Phone: (302) 223-1000
Riverside Adult Day Program
Care or Case Management

Care Management involves the services of care managers (also called “case managers”) who assist clients by assessing physical and mental well-being; providing information and referral regarding appropriate resources; and coordinating social, medical, and housing services. Geriatric care managers are experienced in assisting older people and their families/caregivers with issues relating to long term care options and arrangements. Many care managers offer crisis intervention, counseling, and support services.

Mid-Atlantic Professional Geriatric Care Managers, Inc.
www.gcmonline.org

Case Management Society of America
www.cmsa.org

DHSS Division of Services for Aging and Adults with Physical Disabilities
New Castle County (302) 391-3500
Kent/Sussex County (302) 424-7310
Statewide Toll Free (800) 223-9074
dsaapdinfo@state.de.us

Friends Life Care
531 Plymouth Road, Ste. 500
Plymouth Meeting, PA 19462
(302) 426-1510

IKOR Inc.
P.O. Box 287
Yorklyn, DE 19736
(302) 489-3100
(877) IKOR-USA
www.ikorusa.com

Ingleside Senior Services
1010 W. Broom Street
Wilmington, DE 19806
(302) 575-0283, ext. 2260

Jewish Family Service
99 Passmore Road
Wilmington, DE 19803
(302) 478-9411

Life Solutions, Inc.
P.O. Box 1507
Wilmington, DE 19899
(302) 622-8292

Senior Partner, Inc.
P.O. Box 1908
Wilmington, DE 19899
(302) 425-4001

Division of Senior Social Services/Family Benefit Homecare
3322 Englewood Drive
Wilmington, DE 19810
(302) 725-4022
(877) 220-9755

Supportive Care Services
507 West 9th Street
Wilmington, DE 19801
(302) 655-5518

Brandywine Senior Transitions
P. O. Box 731
Hockessin, DE 19707
(302) 234-1999
COMPANION PROGRAMS

Companion programs for seniors are designed to provide companionship to older people who are lonely and may not be in contact with family or friends for a variety of reasons.

Senior Companion Program

This program links older volunteers to other older individuals who need assistance with the activities of daily living.

Generations Home Care
15 Ashley Place
Wilmington, DE 19804
(302) 658-6731, (302) 734-7005, (302) 856-7774

First State Community Action Agency
P.O. Box 877, Georgetown, DE 19947 (302) 856-7761

Friendly Visiting Programs

CHEER
Sussex County Senior Services, Inc.
546 S. Bedford Street, Georgetown, DE 19947
(302) 856-5187

Telephone Reassurance Program

These programs provide telephone calls to individuals over the age of 60 who are homebound and/or live alone to check on the individual’s well being and see if they require any assistance. For more information, call:

CONTACT Delaware, Inc. - Reassurance Program
P.O. Box 9525
Wilmington, DE 19809
(302) 761-9800 / (800) 262-9800

Interfaith Volunteer Caregivers
Delaware Ecumenical Council
240 N. James St. B-2
Wilmington, DE 19804
(302) 225-1040

Modern Maturity Center
Kent County TRIAD
1121 Forrest Avenue
Dover, DE 19904
(302) 734-1200, ext. 128 or 129

CHEER
Sussex County Senior Services, Inc.
546 S. Bedford Street
Georgetown, DE 19947
(302) 856-5187

SENIOR ROLLCALL LIFELINE
(302) 395-8159
The New Castle County Police “Senior RollCall Lifeline” is a telephone reassurance program that offers daily contact to senior citizens over the age of fifty-five residing in New Castle County who live alone or have a disability that inhibits mobility and have no daily contact with friends or family.
COUNSELING/MENTAL HEALTH SERVICES

Contact your health insurance provider for the services and agencies covered under your health plan.

Mental Health Association
800-287-6423
www.mhainde.org
Provide a “Mental Health Community Resources Directory”

Delaware Division of Substance Abuse and Mental Health
800-6652-2929 or (800) 345-6785
Provide a list of community mental health clinics

Catholic Charities
2601 W. 4th Street
Wilmington, DE 19805
(302) 655-9621
(302) 856-9578

Christiana Counseling
Woodmill Corporate Center, Ste. 47 and 48
Wilmington, DE 19808
(302) 995-1680

Connections CSP
500 W. 10th Street
Wilmington, DE 19801
(302) 984-3380
(866) 477-5345

Delaware Division of Substance Abuse and Mental Health (DSAMH)
1901 N. DuPont Highway
New Castle, DE 19720
(302) 255-9399

Community Mental Health Centers (DSAMH)
(302) 453-4104 (Newark)
(302) 778-6900 (Wilmington)
(302) 857-5073 (Dover)
(302) 856-5490 (Georgetown)

Family Counseling Services
Claymont Community Center
3301 Green Street
Claymont, DE 19703
(302) 792-2757

Jewish Family Service of Delaware
99 Passmore Road
Wilmington, DE 19803
(302) 478-9411
(302) 286-1402

Kent County Counseling
1525 Lebanon Road
Dover, DE 19901
(302) 735-7790

La Red Health Center
505 W. Market Street
Georgetown, DE 19947
(302) 855-1233

Newark Family Counseling Center
P.O. Box 5505,
Newark, DE 19711
(302) 368-6895

Open Door (Senior Evaluation and Assistance Program)
3301 Green Street
Claymont, DE 19703
(302) 798-9555
(302) 731-1504

People’s Place
1129 Airport Road
Milford, DE 19963
(302) 422-8026
Phoenix Behavioral Health of Dover
567 S. Governors Avenue
Dover, DE 19904
(302) 736-6135

Psychotherapeutic Community Services
630 W. Division Street,
Dover, DE 19904
(302) 674-3366

Sussex County Counseling
20728 N. DuPont Blvd.
Georgetown, DE 19947
(302) 854-0172

Adult Protective Services
(800) 223-9074

**ELDER LAW PROGRAM**

Community Legal Aid Society, Inc.
Elder Law/Disabilities Law Program
100 W. 10th Street, Suite 801
Wilmington, DE 19801
(302) 575-0666

Elder Law/Disabilities Law Program
840 Walker Rd.
Dover, DE 19904
(302) 674-3684

Elder Law/Disabilities Law Program
144 E. Market St.
Georgetown, DE 19947
(302) 856-4112

**EMPLOYMENT**

DELARF
www.delarf.org
(302) 622-9177

*A list of Delaware agencies that offer employment training and placement services for persons with disabilities and older adults.*
PERSONAL EMERGENCY RESPONSE SYSTEMS (PERS)

These systems let you call for help in an emergency by pushing a button worn around the wrist or neck.

Advanced Alert
(302) 436-9406

Critical Signal Technologies
(888) 547-4462

Life Station
(866) 235-1747

Link to Life
(877) 442-3232

Lifeline Systems
(800) 368-2925

Med Scope
(610) 642-9881, ext. 709

Phillips Lifeline
(800) 451-0525

Response Link
(302) 456-9012 or (302) 644-6990

HOME HEALTH CARE (HHC)

Home health care includes a wide range of health care services provided in the patient’s home. It can include skilled care such as physical therapy and medical care and homemaker services such as meal preparation, housekeeping, and shopping. Hospice provides care, comfort, and emotional support when recovery is no longer possible. Hospice listings can also be found at www.hospicedirectory.org

HHC-New Castle County

Absolute Home Health Care
262 Chapman Road
Newark, DE 19702
(302) 369-1050

ADDUS HealthCare
5614 Kirkwood Highway
Wilmington, DE 19808
(302) 995-9010

Amedisys Home Health
260 Chapman Road, Ste. 200
Newark, DE 19702
(302) 294-2001

Aston Home Health
1021 Gilpin Ave.
Wilmington, DE 19806
(302) 421-3686 / 3687

Bayada Nurses, Inc.
750 Shipyard Dr.
Wilmington, DE 19801
(302) 658-3000
(302) 655-1333

Bayada Nurses, Inc.
1400 Peoples Plaza
Newark, DE 19702
(302) 836-1000

Christiana Care/Visiting Nurse Association
One Read’s Way, Suite 100
New Castle Corporate Commons
New Castle, DE 19720
(302) 327-5200

Comfort Care at Home
260 Chapman Road
Newark, De 19702
(302) 737-8078
<table>
<thead>
<tr>
<th>Company</th>
<th>Address</th>
<th>Phone Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Comfort Keepers</strong></td>
<td>35 Salem Church Road</td>
<td>(302) 286-0100</td>
</tr>
<tr>
<td><strong>Companion Hearts, LLC</strong></td>
<td>276 E. Main St., Ste.9</td>
<td>(302) 731-9270</td>
</tr>
<tr>
<td><strong>Compassionate Care Hospice</strong></td>
<td>702B Kirkwood Highway</td>
<td>(800) 219-0092</td>
</tr>
<tr>
<td><strong>Compassionate Home Care</strong></td>
<td>5239 W. Woodmill Drive</td>
<td>(302) 999-8864, (302) 253-8417</td>
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<tr>
<td><strong>Delaware Hospice, Inc.</strong></td>
<td>3515 Silverside Road</td>
<td>(302) 478-5707, (800) 838-9800</td>
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<tr>
<td><strong>Eldercare Molter Associates</strong></td>
<td>3203 Concord Pike, Suite 2</td>
<td>(302) 479-5200</td>
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<tr>
<td><strong>Family Benefit Homecare</strong></td>
<td>3322 Englewood Road</td>
<td>(302) 725-4022</td>
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<tr>
<td><strong>Generations Home Care</strong></td>
<td>15 Ashley Place</td>
<td>(302) 658-6731</td>
</tr>
<tr>
<td><strong>Griswold Special Care</strong></td>
<td>1915 Kirkwood Highway</td>
<td>(302) 456-9904</td>
</tr>
<tr>
<td><strong>Guava Homecare, Inc.</strong></td>
<td>307 Valley Brook Drive</td>
<td>(302) 399-6389, (302) 898-1563</td>
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<tr>
<td><strong>Heartland Home Health</strong></td>
<td>and Hospice</td>
<td>(302) 737-7080</td>
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<tr>
<td><strong>Heartland Hospice House</strong></td>
<td>of Delaware</td>
<td>(302) 239-2961</td>
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<tr>
<td><strong>Home Helpers</strong></td>
<td></td>
<td>(302) 633-6090</td>
</tr>
<tr>
<td><strong>Home Instead Senior Care</strong></td>
<td>1701 Shallcross Ave.</td>
<td>(302) 654-4003</td>
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<tr>
<td><strong>Homewatch Caregivers</strong></td>
<td></td>
<td>(302) 442-4260</td>
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<tr>
<td><strong>Ingleside Home Health Care</strong></td>
<td>1005 N. Franklin St.</td>
<td>(302) 575-0250</td>
</tr>
<tr>
<td><strong>Interim Health Care</strong></td>
<td>2 Reads Way, Suite 123</td>
<td>(302) 322-2743</td>
</tr>
<tr>
<td>Company</td>
<td>Address</td>
<td>Phone</td>
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<tr>
<td>Jewish Family Service</td>
<td>99 Passmore Road</td>
<td>(302) 478-9411</td>
</tr>
<tr>
<td>Maxim Healthcare</td>
<td>1409 Foulk Road, Suite 203</td>
<td>(302) 478-3434</td>
</tr>
<tr>
<td>Neuro Care/Total Care</td>
<td>201 Ruthar Drive, Suite 5</td>
<td>(302) 738-6400</td>
</tr>
<tr>
<td>Odyssey Health Care</td>
<td>1407 Foulk Road, Ste. 200</td>
<td>(302) 479-7500</td>
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<tr>
<td>Oncology Care Home Health</td>
<td>267 E. Main St.</td>
<td>(302) 455-1500</td>
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<tr>
<td>Right at Home</td>
<td>1500 N. French Street</td>
<td>(302) 652-1550</td>
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<tr>
<td>St. Francis Home Health Care</td>
<td>7th and Clayton Streets</td>
<td>(302) 575-8240</td>
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<tr>
<td>Saints Home Health Care</td>
<td>1601 Concord Pike</td>
<td>(302) 652-4617</td>
</tr>
<tr>
<td>Seasons Hospice</td>
<td>220 Continental Drive</td>
<td>(302) 533-3800</td>
</tr>
<tr>
<td>Senior Helpers</td>
<td>726 Yorklyn Road, Suite 410</td>
<td>(302) 234-1274</td>
</tr>
<tr>
<td>Vitas Innovative Hospice</td>
<td>100 Commerce Drive, Suite 302</td>
<td>(800) 938-4827</td>
</tr>
<tr>
<td>Your Own Home, LLC</td>
<td>3622A Silverside Road</td>
<td>(302) 478-7081</td>
</tr>
<tr>
<td>HHC-Kent County</td>
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<tr>
<td>ADDUS Health Care</td>
<td>1003 Mattlind Way</td>
<td>(302) 424-4842</td>
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<tr>
<td>Amedisys Home Health</td>
<td>1221 College Park Dr.</td>
<td>(302) 678-4764</td>
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<tr>
<td>Bayhealth at Kent General</td>
<td>560 S. Governors Avenue</td>
<td>(302) 744-7300</td>
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<tr>
<td>Bayhealth at Milford Memorial</td>
<td>104 N.E. Front Street</td>
<td>(302) 424-8200</td>
</tr>
<tr>
<td>Choices for Seniors, Inc.</td>
<td>1030 Forrest Ave Stes. 125-126</td>
<td>(518) 954-3303</td>
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<td></td>
<td>(302) 678-3430</td>
</tr>
<tr>
<td>Service Provider</td>
<td>Address</td>
<td>Phone Numbers</td>
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<tr>
<td><strong>Christiana Care Visiting Nurse Association</strong></td>
<td>2116 S. DuPont Highway Suite 2 Camden, DE 19934 (302) 698-4300</td>
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<tr>
<td><strong>Comfort Keepers</strong></td>
<td>282 Milford-Harrington Hwy. Milford, DE 19963 (302) 422-0955</td>
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<tr>
<td><strong>Delaware Hospice</strong></td>
<td>911 S. DuPont Hwy. Dover, DE 19901 (302) 678-4444 (800) 838-9800</td>
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<tr>
<td><strong>Generations Home Care, Inc.</strong></td>
<td>1125 Forrest Ave. Dover, DE 19904 (302) 734-7005</td>
<td></td>
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<tr>
<td><strong>Home Instead Senior Care</strong></td>
<td>PO Box 39 (mail) 11550 Willow Grove Rd. Wyoming, DE 19934 (302) 697-6435</td>
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<tr>
<td><strong>Interim Health Care</strong></td>
<td>1679 S. DuPont Highway Dover, DE 19901 (302) 734-3131</td>
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<tr>
<td><strong>Saints Home Health Care</strong></td>
<td>3985 N. DuPont Highway Dover, DE 19904 (302) 883-2047</td>
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<tr>
<td><strong>Senior Helpers</strong></td>
<td>9 E. Loockerman St., Ste. 306 Dover, DE 19901 (302) 674-2234</td>
<td></td>
</tr>
<tr>
<td><strong>Absolute Home Health</strong></td>
<td>31039 Country Gardens Blvd. Dagsboro, DE 19939 (302) 369-1050</td>
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<tr>
<td><strong>Addus Home Health</strong></td>
<td>1003 Mattlind Way Milford, DE 19963 (302) 424-4842</td>
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<tr>
<td><strong>Amedisys Home Health</strong></td>
<td>21309 Berlin Rd. Georgetown, DE 19947 (302) 855-0310</td>
<td></td>
</tr>
<tr>
<td><strong>Beebe Home Health Agency</strong></td>
<td>20232 Ennis Rd. Georgetown, DE 19947 (302) 854-5210</td>
<td></td>
</tr>
<tr>
<td><strong>CHEER Inc. Homemaker and Home Health Services</strong></td>
<td>20520 Sandhill Road Georgetown, DE 19947 (302) 856-5187</td>
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<tr>
<td><strong>Christiana Care Visiting Nurse Association</strong></td>
<td>600 N. DuPont Hwy. Suite 203 Georgetown, DE 19947 (302) 855-9700</td>
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<tr>
<td><strong>Compassionate Care Hospice</strong></td>
<td>31038 Country Garden Blvd. Ste. D2 Dagsboro, DE 19931 (302) 934-5900</td>
<td></td>
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<tr>
<td><strong>Delaware Hospice</strong></td>
<td>100 Patriots Way Milford, DE 19963 (302) 856-7717 (800) 838-9800</td>
<td></td>
</tr>
</tbody>
</table>
Generations Home Care, Inc.
205 East Market Street
Georgetown, DE 19947
(302) 856-7774

Griswold Special Care
109 Market Street
Lewes, DE 19958
(302) 644-6990

Heartland Hospice
17577 Nassau Commons Blvd.
Lewes, DE 19958
(302) 645-6237

Peninsula Home Care
8470 Herring Run Road
Seaford, DE 19973
(302) 629-4914

Vitas Hospice
1016 N. Walnut Street
Milford, DE 19963
(302) 451-4000

**EXERCISE PROGRAMS**

The following is a brief list of local YMCA organizations offering accessible exercise programs. Please consult your doctor or rehabilitation therapist before participating in such activities.

Bear-Glasgow Family YMCA
351 George Williams Way
Newark, DE 19702
302-836-YMCA

Central YMCA
501 West Eleventh St
Wilmington, DE 19801
302-254-YMCA

Griswold Special Care
109 Market Street
Lewes, DE 19958
(302) 644-6990

Heartland Hospice
17577 Nassau Commons Blvd.
Lewes, DE 19958
(302) 645-6237

Peninsula Home Care
8470 Herring Run Road
Seaford, DE 19973
(302) 629-4914

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Griswold Special Care
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(302) 644-6990

Heartland Hospice
17577 Nassau Commons Blvd.
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Peninsula Home Care
8470 Herring Run Road
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(302) 629-4914

Vitas Hospice
1016 N. Walnut Street
Milford, DE 19963
(302) 451-4000

**TRANSPORTATION**

AMTRAK
(800) USA-RAIL

Greyhound Bus
800-231-2222
www.greyhound.com

National Highway and Transportation Safety Administration
www.nhtsa.gov/cars/rules/adaptive
Provides information on automotive safety issues for persons with disabilities.

National Mobility Equipment Dealers Association
(800)833-0427
www.nmeda.org for information
Accessible Van and Mobility
(800) 784-8267 / (856) 829-9449
www.avmvans.com

M.I.T.S. Corporation
(800) 243-6487
www.mitscorp.com

Accessible Vans of America
(888) 306-8320
www.accessiblevans.com

American Mobility
(302) 276-1801
www.americanmobilitysales.com

Wheelchair Getaways
(800) 642-2042
www.wheelchairgetaways.com

Wheelers
(800) 456-1371

ScootAround
Wheelchair and scooter sales and rentals
888-441-7575

Accessible Journeys
Arranges accessible vacations across the world.
800-846-4537
www.disabilitytravel.com

DART First State
www.dartfirststate.com
(800) 652-DART
In New Castle County (302) 652-DART

PARATRANSIT SERVICE Reservations
(800) 553-DART
Door to door transportation for persons who are certified as having a qualifying disability, renal dialysis and the aging. Reservations must be made by 4:30 p.m. the day before.

SCAT (Senior Citizen Affordable Taxi)
(800) 652-DART for information.
Provides half-price taxi service for persons aged 60 and over and qualified disabled persons.

SEPTA
Commuter trains
(215) 580-7800

FISH of Northern Delaware
(302) 658-2954
FISH volunteers provide transportation to appointments at doctors, clinics and hospitals in Delaware. This is for ambulatory persons when no other agency or resource is available. No service is available on Friday, weekends, or holidays, nor is service available at the last minute or for repetitive appointments or for physical therapy.

Generations Home Care, Inc.
New Freedom Funds Transportation Program
New Castle County (302) 658-6731
Kent County (302) 734-7005
Sussex County (302) 856-7774
This program provides transportation to Delaware residents with disabilities of all ages at $5.00 per trip. A 3-day advance notice is suggested, but requests will be considered on a space available basis.

Delaware Transit Corporation
(800) 553-DART or www.dartfirststate.com/directory/
Provides a Directory of Transportation Services in the state of Delaware listing additional transportation providers.

Travelin’ Talk
This is a network of people and organizations worldwide willing to provide assistance to travelers with disabilities.
P.O. Box 3534
Clarksville, TN 37043
Travelintalk.net
**SENIOR SERVICES & HEALTH ORGANIZATIONS**

**Claymore Senior Center and Fitness Center**  
504 S. Clayton St.  
Wilmington, DE 19805  
(302) 428-3170

**Fraim Center for Active Adults**  
669 S. Union Street  
Wilmington, DE 19805  
(302) 658-8420

**Francis X. Norton Senior Center**  
920 N. Monroe Street  
Wilmington, DE 19801  
(302) 654-5407

**Jimmy Jenkins Senior Center**  
2300 Bowers Street  
Wilmington, DE 19802  
(302) 764-9022

**Latin American Community Center (Centro Los Abuelos)**  
403 N. Van Buren Street  
Wilmington, DE 19805  
(302) 655-7338, ext. 7746

**People’s Settlement Association Senior Center**  
408 E. 8th Street  
Wilmington, DE 19801  
(302) 658-4133

**Salvation Army Senior Center**  
400 N. Orange Street  
Wilmington, DE 19801  
(302) 472-0770

**St. Anthony’s Senior Center**  
1703 W. 10th St. (1st floor)  
Wilmington, DE 19805  
(302) 421-3735

**St. Patrick’s Center**  
107 East 14th Street  
Wilmington, DE 19801  
(302) 652-6219

**St. Peter’s Adult Center**  
523 Tatnall Street  
Wilmington, DE 19801  
(302) 571-8394

**South Wilmington Senior Adult Program**  
455 Townsend Street  
Wilmington, DE 19801  
(302) 655-7751

**West Center City Senior Adult Center**  
501 N. Madison Street  
Wilmington, DE 19801  
(302) 658-5332

**Wilmington Senior Center**  
1901 N. Market Street  
Wilmington, DE 19802  
(302) 651-3400

**Absalom Jones Senior Center**  
310 Kiamensi Road  
Wilmington, DE 19804  
(302) 998-0363

**Brandywine Senior Center**  
Claymont Community Center  
3301 Green Street  
Claymont, DE 19703  
(302) 798-5562

**C & D Senior Center**  
Liberty Terrace Apts. Community Room  
Freedom Rd  
Newark, DE 19702  
(302) 323-2630
Cornerstone Senior Center
3135 Summit Bridge Road
Bear, DE 19701
(302) 836-6463

De La Warr Senior Center
19 Lambson Lane
New Castle, DE 19720
(302) 429-0581

Howard Weston Senior Center
1 Bassett Ave., Manor Park
New Castle, DE 19720
(302) 328-6094 or 328-6626

Jewish Community Center
(Bernard and Ruth Siegel Center)
101 Garden of Eden Road
Wilmington, DE 19803
(302) 478-5660

Mid-County Senior Center
First Regiment Road
Wilmington, DE 19808
(302) 995-6555

M.O.T. Senior Center
300 South Scott St.
Middletown, DE 19709
(302) 378-3041 or 378-4758

New Castle Senior Center
400 South Street
New Castle, DE 19720
(302) 326-4209

Newark Senior Center and Fitness Center
200 White Chapel Drive
Newark, DE 19713
(302) 737-2336

Oak Grove Senior Center
11 Poplar Avenue
Wilmington, DE 19805
(302) 998-3310

Sellers Senior Center
500 Duncan Road
Wilmington, DE 19809
(302) 762-2050

First State Senior Center
Kent/Sussex Industry Bldg., Southern Wing
291 N. Rehoboth Blvd.
Milford, DE 19963
(302) 422-1510 / 422-1511

Frederica Senior Center
216 S. Market Street
Frederica, DE 19946
(302) 335-4555 (24 hr. answering machine)

Harrington Senior Center
102 Fleming Street
Harrington, DE 19952
(302) 398-4224

Harvest Years Senior Center
30 South Street
Camden, DE 19934
(302) 698-4285

Mamie A. Warren Maturity Center
1775 Wheatley Pond Road
Smyrna, DE 19977
(302) 653-4078

Milford Senior Center
111 Park Avenue
Milford, DE 19963
(302) 422-3385

Modern Maturity Center
1121 Forrest Avenue
Dover, DE 19904
(302) 734-1200

Lillian Smith Senior Center
P.O. Box 76
410 Main Street
Clayton, DE 19938
(302) 653-6119
Adult Plus+ Program  
DTCC, Jack F. Owens Campus  
P.O. Box 610  
Georgetown, DE 19947  
(302) 856-5618

Bridgeville Senior Center  
414 Market Street  
Bridgeville, DE 19933  
(302) 337-8771

Cape Henlopen Senior Center  
11 Christian Street  
Rehoboth, DE 19971  
(302) 227-2055

Georgetown CHEER Activity Center  
546 S. Bedford Street  
Georgetown, DE 19947  
(302) 856-5187

Greenwood CHEER Activity Center  
41 Schulze Road  
Greenwood, DE 19950  
(302) 349-5237

Harbor Lights CHEER Activity Center  
34211 Woods Edge Drive  
Lewes, DE 19956  
(302) 645-9239

Indian River Senior Center  
214 Irons Ave.  
Millsboro, DE 19966  
(302) 934-8839

Laurel Senior Center  
P.O. Box 64, 13 N. Central Ave  
Laurel, DE 19956  
(302) 875-2536

Lewes Senior Center  
310 Nassau Park Road  
Lewes, DE 19958  
(302) 645-9293

Nanticoke Senior Center  
23431 Sussex Highway  
Seaford, DE 19973  
(302) 629-4939

Long Neck CHEER Activity Center  
26089 Shoppes at Long Neck  
Millsboro, DE 19966  
(302) 945-3551

Ocean View CHEER Activity Center  
30637 Cedar Neck Road  
Ocean View, DE 19970  
(302) 539-2671

Roxana CHEER Activity Center  
34314 Pyle Center Road  
Frankford, DE 19945  
(302) 732-3662

Slaughter Neck  
CHEER Activity Center  
22942 Slaughter Neck Road  
Lincoln, DE 19960  
(302) 684-4819
STROKE SUPPORT GROUPS

The following support groups are designed for the stroke survivor and/or their family and caregivers. Such groups offer the individual a chance to meet with others who are learning to adapt to life following a stroke, and provide them with community involvement and useful informational sessions regarding stroke.

Delaware Stroke Initiative Stroke Support Group
Newark Senior Center
200 White Chapel Drive
Newark, DE 19713
302-757-4886
Meets the second Thursday of every month from 7pm – 8:45pm.

Milford Stroke Club
Milford Memorial Hospital
21 West Clarke Ave.
Milford, DE 19963
Meets the second Thursday of every other month starting in January from 4pm – 5:30pm.

ACCESSIBLE ACTIVITIES

Easter Seals Camp Fairlee Manor
22242 Bay Shore Road
Chestertown, MD 21620
410-778-0566
www.de.easterseals.com
Located on 250 rural acres near Chestertown, Maryland and the shores of the Chesapeake Bay, Camp Fairlee Manor has been providing a traditional summer camp experience for adults with disabilities since 1954. No adult is too old to experience the fun of a fully accessible camp with activities such as pool, canoeing, horseback riding and many others. Many caregivers find valuable respite in the services of Camp Fairlee. During the off season there are weekend respite sessions. All indoor facilities are modern with heat and air.

Support - Kent County

Air Mobility Command Museum
1301 Heritage Road
Dover Airforce Base, Dover DE, 19902
302-677-5938
http://amcmuseum.org

Barratts Chapel
6362 Bay Road
Frederica, DE 19946
302-335-5544
www.barratsscrape.org

Biggs Museum of American Art
406 Federal Street
Dover, DE 19901
302-674-2111
www.biggsmuseum.org

Harrington Historical Society Museum
108 Fleming Street
Harrington, DE 19952
302-398-3698

Kent County Theatre Guild
140 East Roosevelt Avenue
Dover, DE 19903
302-674-3568

Smyrna Museum
11 S. Main Street
Smyrna, DE 19977
302-653-1320

Support - New Castle County

County Ashland Nature Center
3511 Barley Mill Road
Hockessin, DE 19707
302-239-2334

Brandywine Zoo
1001 North Park Drive
Brandywine Park
Wilmington, DE 19802
302-571-7747
www.brandywinezoo.org
**Delaware Art Museum**
2301 Kentmere Pkwy.
Wilmington, DE 19806
302-571-9590
www.delart.org

**Delaware Center for the Contemporary Arts**
200 South Madison Street
Wilmington, DE 19801
302-656-6466
www.thedcca.org

**Delaware History Museum**
504 Market Street
Wilmington, DE 9801
302-656-0637

**Delaware Museum of Natural History**
4840 Kennett Pike / Rt. 52
Wilmington, DE 19807
302-658-9111
www.delmnh.org

**Delaware Division of Parks and Recreation**
302-739-9220
www.destateparks.com

**Delaware Symphony Orchestra**
302.652.5577 or 800.374.7263
818 N Market Street
Wilmington, Delaware 19801
www.delawaresymphony.org

**Delaware Theatre Company**
302.594.1100
200 Water Street
Wilmington, DE 19801
delawaretheatre.org

**The Grand Opera House**
302-652-5577 or 800-37-Grand
818 N Market Street
Wilmington, Delaware 19801
www.thegrandwilmington.org

**Hagley Museum**
Rt. 141 & Brandywine River
Wilmington, DE
302-658-2400

**Opera Delaware**
4 South Poplar Street
Wilmington, DE 19801
302-658-8063

**Playhouse Theatre**
10th & Market Sts.
Wilmington, DE 19801
302-656-4401

**Rockwood Museum**
610 Shipley Road
Wilmington, DE 19809
302-761-4340

**University of Delaware Center for Black Culture**
192 S. College Ave.
Newark, DE 19716
302-831-2991

**Wilmington Drama League Community Theatre**
10 W. Lea Blvd.
Wilmington, DE 19802
302-764-1172

**Wilmington & Western Railroad**
2201 Newport Gap Pike
Wilmington, DE 19808
302-998-1930

**Wilmington Blue Rocks**
801 S. Madison St.
Wilmington, DE 19801
302-888-2015
www.bluerocks.com

**Winterthur Museum, Garden & Library**
5105 Kennett Pike, Wilmington, DE 19807
302-888-4600
www.winterthur.org
Support - Sussex County

Georgetown Historical Society  
510 S. Bedford St.  
Georgetown, DE 19947  
302-855-9660

Lewes Historical Society  
110 Shipcarpenter St.  
Lewes, DE 19958  
302-645-7670

Nanticoke Indian Museum  
Rt 24 & Oak Orchard Intersection  
Millsboro, DE 19966  
302-945-7022  
www.nanticokeindians.org

Milford 2nd St. Players  
2 South Walnut St.  
Milford, DE 19963  
302-422-0220

Possum Point Players  
Old Laurel Highway  
Georgetown, DE 19947  
302-856-3460

ASSISTIVE TECHNOLOGY

Delaware Assistive Technology Initiative (DATI)  
Central Site and University of Delaware and  
DuPont Hospital for Children  
Center for Applied Science and Engineering  
1600 Rockland Road, A and R Building, Room 200  
P.O. Box 269, Wilmington, DE 19899  
Voice: (800) 870-DATI (in-state only)  
Voice: (302) 651-6790  
TTY: (302) 651-6794  
www.dati.org

DATI Kent County Assistive Technology Resource Center  
Easter Seals of Delaware and Maryland’s Eastern Shore

DATI Sussex County Assistive Technology Resource Center  
University of Delaware  
20123 Office Circle, Georgetown, DE 19947  
Voice: (302) 856-7946  
TTY: (302) 856-6714

Easter Seals Resource & Technology Demonstration Center  
61 Corporate Circle  
New Castle, De 19720-2405  
302-324-4444  
www.de.easterseals.com  
The resource center has hundreds of sample items to demonstrate how a person with physical disabilities can remain independent at home or work. In addition, there are DVD’s and catalogs with thousands of ideas and products for independence. Other services include the Assistive Technology (financial) Loan Program, Caregiver Resource Center, Aging and Disability Resource Center, Delaware Lifespan Respite Care Network, and AgrAbility assistance for farmers.

Other Easter Seals locations:

100 Enterprise Place, Suite 1  
Dover, DE 19904-8200  
302-678-3353

22317 DuPont Boulevard  
Georgetown, DE 19947  
302-253-1100

www.de.easterseals.com
Let Easter Seals help you open the door to new possibilities

EASTER SEALS CAN HELP THE STROKE SURVIVOR REGAIN INDEPENDENCE THROUGH A VARIETY OF SERVICES

Adult Day Health Services – an affordable alternative to a nursing home
A day program for adults with physical disabilities where participants chose from a variety of fun activities each day. Nurse supervision, transportation and meals are included. Physical, Occupational, and Speech Therapy is available. Flexible schedules.

Resource & Technology Demonstration Center
A 3,000 sq ft center filled with hundreds of innovative “tools for independence” like a talking microwave, one handed keyboard, and communications devices that will help you be independent at home, work or school.

Assistive Technology Loan Program
Through collaboration with the Division of Vocational Rehabilitation, this program helps people afford the equipment they need to live independently. Low-interest loans are made in partnership with local lending institutions.

The Caregiver and Assistive Technology Resource Center
Funded through the Division of Services for Aging and Adults with Physical Disabilities, the center has information and resources for persons who are caregivers to another adult.

Respite Services
Easter Seals has a variety of respite services to meet the caregiver’s need for a break. Call for information on grants available on a limited basis to pay for respite services.

Personal Attendant Services
The helping hands of another person can make promote more independence at home, work or school.

Three locations in Delaware to serve you!
New Castle 302.324.4444  Dover 302.678.3353  Georgetown 302.253.1100

See the possibilities at www.de.easterseals.com
OTHER RESOURCES &
PRODUCTS

AbilityHub
www.abilityhub.com
Adaptive equipment and methods for accessing computers.

Abledata
800-227-0216
www.abledata.com
National database for adaptive equipment.

Sammons Preston Adaptive Equipment and Device Aids
800-323-5547
www.sammonsprestion.com

Canine Companions for Independence
800-572-2275
www.caninecompanions.org
Offers canine companions for individuals with a disability at virtually no cost.

ElderCorner
www.eldercorner.com
Information on health-related issues.

Home Health Care Products & Adaptive Equipment for Independence
www.thewright-stuff.com

The National Center on Physical Activity and Disability (NCPAD)
800-900-8086
www.ncpad.com
Helps supply databases and information on recreation and sports programs and equipment vendors from across the U.S.

Paralympics
719-866-2035
www.usparalympics.org
Provides services to disabled athletes.

Quartet Technology Incorporated
978-649-4ECU
www.qtiusa.com
Offers units that are voice activated with switches or computer mouse.

RehabMart.com
www.rehabmart.com
Online discount medical equipment and supply company.

Service Monkeys
617-787-4419
www.helpinghandsmonkeys.org
Provides capuchin monkeys to individuals with disabilities.
UNIVERSITY OF DELAWARE  
College of Health Sciences  
DEPARTMENT OF PHYSICAL THERAPY

Have you or someone you know had a Stroke?

Researchers at the University of Delaware are conducting studies investigating new techniques supported by the National Institutes of Health to improve walking and reaching after a stroke. You can play a role in helping to advance stroke therapy by participating. No fees are charged for participation and monetary compensation is available for participation in some studies.

For more information contact Ruby Carey at 302-831-0150 or racarey@udel.edu
St. Francis Hospital is Stroke Certified Because Seconds Count.