March is National Multiple Sclerosis Awareness Month
What Is MS?

- Multiple sclerosis (MS) is an unpredictable, often disabling disease of the central nervous system that disrupts the flow of information within the brain, and between the brain and body.

- In multiple sclerosis, damage to the myelin in the central nervous system (CNS) — and to the nerve fibers themselves — interferes with the transmission of nerve signals between the brain and spinal cord and other parts of the body.

- Multiple sclerosis is a chronic, unpredictable disease of the central nervous system (CNS), which is made up of the brain, spinal cord and optic nerves. It is thought to be an immune-mediated disorder, in which the immune system incorrectly attacks healthy tissue in the CNS.

MS can cause many symptoms, including blurred vision, loss of balance, poor coordination, slurred speech, tremors, numbness, extreme fatigue, problems with memory and concentration, paralysis, and blindness and more. These problems may come and go or persist and worsen over time. Most people are diagnosed between the ages of 20 and 50, although individuals as young as 2 and as old as 75 have developed it.
What Causes MS?

- The cause of MS is still unknown – scientists believe the disease is triggered by as-yet-unidentified environmental factor in a person who is genetically predisposed to respond.

- The progress, severity and specific symptoms of MS in any one person cannot yet be predicted. Most people with MS are diagnosed between the ages of 20 and 50, with at least two to three times more women than men being diagnosed with the
Incidence and prevalence of MS

- The **incidence** of a disease is the number of new cases occurring in a given period of time (usually a year) in a given population (usually 100,000). With the challenges inherent in promptly and correctly identifying people with MS, arriving at an accurate incidence figure has been virtually impossible.

- The **prevalence** of MS is the number of people with MS at a particular point in time, in a particular place. Most epidemiological studies in MS focus on prevalence.

- While prevalence is a bit easier to determine than incidence, the diagnostic issues can distort these figures as well, since all persons with MS are included in prevalence figures regardless of how long they have had the disease. Of the MS prevalence studies that have been conducted worldwide, the data from the northern hemisphere are the most reliable thus far.
Summarizing epidemiological estimates

- Although more people are being diagnosed with MS today than in the past, the reasons for this are not clear. Likely contributors, however, include greater awareness of the disease, better access to medical care and improved diagnostic capabilities. There is no definitive evidence that the rate of MS is generally on the increase.

- Most people are diagnosed between the ages of 20 and 50, although MS can occur in young children and significantly older adults.

- MS occurs in most ethnic groups, including African-Americans, Asians and Hispanics/Latinos, but is more common in Caucasians of northern European ancestry.

- In general, MS is more common in areas farthest from the equator. However, prevalence rates may differ significantly among groups living in the same geographic area regardless of distance from the equator. For example, in spite of the latitude at which they live, MS is almost unheard of in some populations, including the Inuit, Yakutes, Hutterites, Hungarian Romani, Norwegian Lapps, Australian Aborigines and New Zealanders — indicating that ethnicity and geography interact in some complex way to impact prevalence figures in different parts of the world.

- Migration from one geographic area to another seems to alter a person’s risk of developing MS. Studies indicate that immigrants and their descendants tend to take on the risk level — either higher or lower — of the area to which they move. The change in risk, however, may not appear immediately. Those who move in early childhood tend to take on the new risk themselves. For those who move later in life, the change in risk level may not appear until the next generation. While underlining the complex relationship between environmental and genetic factors in determining who develops MS, these studies have also provided support for the opinion that MS is caused by early exposure to some environmental trigger in genetically susceptible individuals.

- MS is at least two to three times more common in women than in men, suggesting that hormones may also play a significant role in determining susceptibility to MS. And some recent studies have suggested that the female to male ratio may be as high as three or four to one.
Genetics

- Genetic factors are thought to play a significant role in determining who develops MS.
- The average person in the United States has about one in 750 (.1%) chance of developing MS.
- For first-degree relatives of a person with MS, such as children, siblings or non-identical twins, the risk rises to approximately 2.5-5%—with the risk being potentially higher in families that have several family members with the disease.
- The identical twin of someone with MS (who shares all the same genes) has a 25% chance of developing the disease. If genes were solely responsible for determining who gets MS, an identical twin of someone with MS would have a 100% chance of developing the disease; the fact that the risk is only one in four demonstrates that other factors, including geography, ethnicity and the elusive infectious trigger, are likely involved as well.
- Research has demonstrated that MS occurs in most ethnic groups, including African-Americans, Asians and Hispanics/Latinos, but is most common amongst Caucasians. Susceptibility rates vary among these groups, with recent findings suggesting that African American women have a higher than previously reported risk of developing MS.
Does MS always cause paralysis?

- No. Moreover, the majority of people with MS do not become severely disabled. Two-thirds of people who have MS remain able to walk, though many will need an aid, such as a cane or crutches, and some will use a scooter or wheelchair because of fatigue, weakness, balance problems, or to assist with conserving energy.

Is MS fatal?

- Life expectancy for people with MS has increased over time. We believe this is due to treatment breakthroughs, improved healthcare and lifestyle changes. Recent research however, indicates that people with MS may live an average of about seven years less than the general population because of disease complications or other medical conditions. Many of these complications are preventable or manageable. Attention to overall health and wellness can help reduce the risk of other medical conditions, such as heart disease and stroke, that can contribute to a shortened life expectancy. In some rare instances, there are cases of MS that progress rapidly from disease onset and can be fatal.
Can MS be cured?

- Not yet. There are now FDA-approved medications that have been shown to "modify" the course of MS by reducing the number of relapses and delaying progression of disability to some degree. In addition, many therapeutic and technological advances are helping people manage symptoms. Advances in treating and understanding MS are made every year, and progress in research to find a cure is very encouraging.

What medications and treatments are available?

- The National Multiple Sclerosis Society recommends that a person consider treatment with one of the FDA-approved "disease-modifying" drugs as soon as possible following a definite diagnosis of MS with active or relapsing disease. These medications help to reduce inflammation in the CNS, reduce the frequency and severity of MS attacks and the numbers of lesions in the CNS, and may slow the progression of disability.

In addition these medications that address the disease process, there are many medications and other strategies to manage MS symptoms such as spasticity, pain, bladder problems, fatigue, sexual dysfunction, weakness, and cognitive problems. People should consult a knowledgeable MS care provider to develop a comprehensive plan to manage their MS.
The National MS Society

The National MS Society is a collective of passionate individuals who want to do something about MS now — to move together toward a world free of multiple sclerosis. MS stops people from moving. We exist to make sure it doesn't.

To contact us, please call 1-800-344-4867 or complete the information below with as much detail as possible.

Strength, courage, love and hope. Go ORANGE for Multiple Sclerosis Awareness Month.

Retrieved from http://www.nationalmssociety.org/Chapters/CAL/Raise-Awareness