



The Liker Health Report

Keeping People Focused on Staying Fit & Healthy

Fall 2007

The Liker Health Report is a quarterly publication intended to raise awareness of health-related issues and to encourage readers to take charge of their health and live healthier, more fulfilling lives.

The Heart of the Matter: DVT & AIR TRAVEL

Deep Vein Thrombosis (DVT) is a blood clot in a vein located deep within the muscles, usually the thigh or calf. DVT typically occurs when a person has been sitting for long periods of time without taking a stretch break or walking around, often on an airplane. DVT has been jokingly referred to as “economy-class syndrome” because of the limited space between airplane seats. However, it can also happen to first class passengers, as well as car travelers and train riders who do not move around. The length of travel is also a factor; a 12-hour flight puts a person at more risk than a 2-hour flight, especially if he/she is inactive the entire time. The average person’s risk of developing a blood clot during any type of travel longer than four hours is one in 6,000.

DVT can turn deadly if a piece of the blood clot breaks off and travels through the bloodstream to the lungs; this is referred to as a pulmonary embolism. A pulmonary embolism can be treated if detected in time and medical treatment is rendered immediately. Symptoms include chest pain, unexplained shortness of breath, and coughing up blood. If you suspect a pulmonary embolism, sit down and call, or have someone call 9-1-1.

The treatment for DVT and pulmonary embolism is blood thinners, such as heparin. Blood thinners do not dissolve the existing clot but prevent it from getting bigger and from developing new ones. Thrombolytics (“clot-busting” drugs) are administered intravenously to dissolve a large clot which is otherwise unlikely to dissolve on its own. Anyone who has had a DVT has an increased risk of developing others, so patients are prescribed blood thinners, such as Coumadin (Warfarin) for long-term use. If clots continue to form, a surgeon can insert a filter into the large abdominal vein (vena cava) which prevents clots from moving from the legs to the heart and lungs. This can be a temporary or permanent solution depending on the patient’s needs.

The Solution

Walk whenever possible -- whether it’s up and down the aisle or in the airport terminal. Walking causes the leg muscles to squeeze the veins and move blood back to the heart. If walking around is not feasible, curl or press your toes downward, as this will also squeeze the leg veins. Research has shown that wearing compression stockings puts gentle pressure on the leg muscles to move the blood and minimize the risk of DVT. Drinking plenty of non-caffeinated, non-alcoholic fluids is important to prevent dehydration. The blood vessels narrow and the blood thickens when the body is in a dehydrated state. Sedatives and large amounts of alcohol should be avoided because these substances make travelers more likely to be immobile for long periods of time.

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Your Lifestyle: DEPRESSION *by Steve Jordan*

Is Depression Holding You Down?

Depression is a very common condition that is believed by many experts to be the number one cause of disability in the world. According to the Mayo Clinic, 17% of people in the U.S. will experience depression at some point in their lives. An estimated 19 million people in the U.S. are currently suffering from depression. And depression is more common in women than in men, with 25% of women suffering from depression severe enough to warrant treatment at least once during their lifetime.

Causes of Depression

There's no simple explanation why people experience depression. It's a complex disease that may develop for a variety of reasons. It can affect anyone at any age, regardless of gender, race, ethnicity, or income level.

Some people become depressed after a major life change — the death of a loved one, a divorce, the loss of a job or a move. Even happy events, such as becoming a parent or getting married, can trigger depression. Or, even a smaller change can sometimes trigger depression.

Signs & Symptoms of Depression*

- ▶ Persistent sad, anxious, or “empty” mood
- ▶ Feelings of hopelessness, pessimism
- ▶ Feelings of guilt, worthlessness, helplessness
- ▶ Loss of interest or pleasure in hobbies and activities that were once enjoyed, including sex
- ▶ Decreased energy, fatigue, being “slowed down”
- ▶ Difficulty concentrating, remembering, making decisions
- ▶ Insomnia, early-morning awakening, or oversleeping
- ▶ Appetite and/or weight loss or overeating and weight gain
- ▶ Thoughts of death or suicide
- ▶ Restlessness, irritability
- ▶ Persistent physical symptoms that do not respond to treatment, such as headaches, digestive disorders, and chronic pain

*According to the U.S. National Institute of Mental Health (NIMH)

Risk Factors for Depression

- ▶ A family history of depression
- ▶ Death or illness of a loved one
- ▶ Stressful conflicts, such as fights with family members or disputes at work
- ▶ Physical, sexual, or emotional abuse
- ▶ Major life events, such as moving, graduating from college, changing jobs, getting married or divorced, becoming a new parent, or retiring
- ▶ Financial difficulties

Exercise has long been recommended as a way to maintain higher levels of fitness, help prevent high blood pressure, diabetes, obesity, and other diseases. Now, a growing volume of research shows that exercise also can help improve symptoms of certain mental conditions, such as depression and anxiety. Exercise also may help prevent a relapse after treatment for depression or anxiety. Current research suggests that it may take at least 30 minutes of exercise a day for at least three to five days a week to significantly improve symptoms of depression. However, smaller amounts of activity, as little as 10 to 15 minutes at a time have been shown to improve mood in the short term. So, small bouts of exercise may be a great way to get started if it's initially too difficult to do more.

Some evidence suggests that exercise positively affects the levels of certain mood-enhancing neurotransmitters in the brain. Exercise may also boost feel-good endorphins, release tension in muscles, help you sleep better and reduce levels of the stress hormone cortisol. All of these changes in your mind and body can improve such symptoms as sadness, anxiety, irritability, stress, fatigue, anger, self-doubt and hopelessness.

Engaging in physical activity offers a sense of accomplishment. Meeting goals or challenges, no matter how small, can boost self-confidence at times when you need it most. Exercise also can make you feel better about your appearance and your self-worth. So if your depression is chronic and/or when you're just having a bad day, you should turn to exercise to help you find your way!

Playing It Safe: CALCIUM INTAKE & LACTOSE INTOLERANCE

One of the main risk factors for developing osteoporosis is inadequate intake of dietary calcium. People who are lactose intolerant tend to avoid calcium-rich dairy products, and most physicians agree that this increases their risk of weakened bones. Unfortunately, the research has not been overwhelmingly consistent and while some suggest that lack of dietary calcium promotes osteoporosis, others show no link. However, it is important for everyone to follow the basic guidelines for building and maintaining strong bones to stave off the debilitating condition of osteoporosis.

The amount of lactose that lactose-intolerant people can digest without intestinal distress varies greatly. An elimination diet (3 days of no dairy products), followed by adding one dairy product every, or every other day, will determine which foods need to be completely eliminated and which can be consumed in moderation. For example, aged cheeses and yogurt are often well-tolerated because they contain a lactase-producing bacteria which counteracts the lactose. Gradually adding small amounts of dairy products into the diet may help improve tolerance in people who have some intestinal lactase. When there is enough lactase to fully digest the lactose, symptoms do not develop. Lactose-free dairy products, such as Lactaid® milk, allow some lactose-intolerant people to reap the benefits of calcium without the gastrointestinal distress.

Digestive aids, such as Lactaid® are dietary supplements containing lactase, which when taken with dairy products, break down the lactose. A fifty percent reduction in the amount of hydrogen produced by undigested lactose in the intestine can be achieved. Many lactose-intolerant people find that these products provide sufficient relief for them to enjoy dairy products, even if mild symptoms remain. If lactose supplements are not helpful, and dairy products must be avoided, there are other good food sources of calcium including green vegetables, tofu, and canned fish with soft edible bones.

Because vitamin D is essential for calcium absorption, it also plays a role in keeping bones healthy. Skin cells manufacture vitamin D when they are exposed to sunlight. Fish oil, egg yolks, and breakfast cereals also contain vitamin D. Anyone with lactose intolerance who is unable to consume adequate amounts of calcium or vitamin D should consult with his/her physician regarding supplementation. The same concern would also apply to vegans who do not consume dairy or animal-derived foods.

Non-Dairy Sources of Calcium (in milligrams)

Fish & Seafood

Sardines, canned in oil, w/bones, 3 ounces	324
Salmon, pink, canned, w/bones, 3 ounces	181

Dry Beans

Navy beans, cooked, 1 cup	126
Northern beans, cooked, 1 cup	120
Chickpeas, cooked, 1 cup	77
Kidney beans, cooked, 1 cup	50
Black beans, cooked, 1 cup	46

Nuts

Almonds, raw, 2 ounces	150
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Soy Products

Soy milk, original, fortified, 1 cup	299
Soy milk, original, non-fortified, 1 cup	61
Soybeans, green, raw, 1 cup	504
Soybeans, green, cooked, 1 cup	261
Tofu soybean curd*, lowfat, firm, ½ cup	154
Tofu soybean curd, lowfat, firm, ½ cup	30

Vegetables

Rhubarb, cooked, ½ cup	174
Spinach, cooked, ½ cup	123
Seaweed kelp, raw, ½ cup	68
Okra, cooked, ½ cup	62
Mustard greens, cooked, ½ cup	52
Swiss Chard, cooked, ½ cup	51
Kale, cooked, ½ cup	47
Cabbage, cooked, ½ cup	36
Broccoli, cooked, ½ cup	31

Fruits

Figs, dried, 5	70
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*Tofu is higher in calcium when it is processed with calcium sulfate

SOURCE: USDA National Nutrient Database for Standard Reference



Did You Know?

Some aged cheeses contain 95% less lactose than whole milk.

The Inside Story: LACTOSE INTOLERANCE

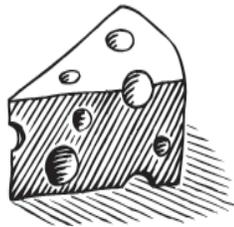
What is lactose intolerance?

Lactose intolerance is a condition resulting from the inability to completely digest the sugar (lactose) found in milk and other dairy products. The reason for the incomplete digestion of lactose is the lack of lactase, an enzyme produced by the lining of the small intestine, which breaks down the lactose. Lactose is broken down into glucose and galactose; galactose is further converted into glucose by the liver which is readily absorbed into the bloodstream and used as energy for the body. In the absence of sufficient lactase, unprocessed lactose enters the colon (large intestine) where it interacts with the normal bacteria (fermentation) to form gases (carbon dioxide) and other products. Lactose intolerance is not a life-threatening condition, but it can produce very uncomfortable symptoms which require dietary modifications.

What are the symptoms of lactose intolerance?

Symptoms occur within thirty minutes to two hours after ingesting foods or beverages containing lactose. Most people experience mild discomfort, however, symptoms can be severe in some people, depending upon age, ethnicity, and how quickly food moves through the digestive tract. Some people experience symptoms only if they consume large quantities of dairy, whereas others are extremely sensitive to the smallest amount of lactose.

- ▶ Diarrhea (most common)
- ▶ Abdominal cramps
- ▶ Bloating
- ▶ Gas
- ▶ Nausea
- ▶ Rumbling in the Abdomen



Milk Allergy vs. Lactose Intolerance

Milk allergy and lactose intolerance are not the same conditions. A true milk allergy is caused by the body's immune system response to the proteins in cow's milk. Drinking even minuscule quantities of milk protein can trigger an allergic reaction. Lactose intolerance is the inability to digest normal quantities of lactose (milk sugar) and does not involve the immune system. Lactaid® can reduce symptoms in someone who has lactose intolerance but not someone who has a milk protein allergy.



THREE TYPES OF LACTOSE INTOLERANCE

Primary Lactose Intolerance –

At birth and during early childhood, the small intestine produces large quantities of lactase due to milk being the primary nutrition source. Milk is typically a large part of a young child's diet in an effort to grow strong bones, but as children grow older and less reliant on milk, the lactase production decreases. This slow decline usually begins around the age of two, yet symptoms do not appear until later. The adult diet is so varied and milk is consumed in smaller quantities and less frequently that the lactase production declines further and may eventually lead to symptoms of lactose intolerance.

Secondary Lactose Intolerance – The small intestine temporarily decreases the lactase production due to an illness (i.e., gastroenteritis, inflammatory bowel disease, or celiac disease) or surgery in the small intestine. The lactose intolerance is usually reversible with a few weeks after an acute illness; if the illness is chronic, the lactose intolerance is permanent.

Congenital Lactose Intolerance – An infant can be born with lactose intolerance if he/she inherits a defective gene from both the mother and father. Although rare, this condition prevents infants from drinking their mother's breast milk and must instead drink lactose-free infant formula. An indicator that an infant has congenital lactose intolerance is that he/she will have diarrhea from birth.

Who is likely to become lactose intolerant?

The symptoms of lactose intolerance usually begin in adolescence and early adulthood, for the reasons mentioned above. Infants born prematurely can have lower lactase levels since production of the lactase enzyme increases significantly in the later part of the third trimester. Some ethnic and racial populations, including Black, Asian, Hispanic, are more likely to develop lactose intolerance.

Approximate Incidence of Lactose Intolerance in Adults

Ethnic Group	% Intolerant
African Blacks	97-100
Dravidian Indians (India)	95-100
Asians	90-100
Mexican Americans	70-80
North American Blacks	70-75
Mediterraneans	60-90
Jews	60-80
Central & North American Indians	25-65
Middle Europeans	10-20
North American Caucasians	7-15
Northwestern Indians (India/Pakistan)	3-15
Northern Europeans	1-5

How is lactose intolerance diagnosed?

- ▶ **Lactose Tolerance Test** -- Following an overnight fast, a high-lactose beverage is consumed and blood samples are taken over a 2-hour period to measure blood glucose levels. Normally, lactase will break down the lactose into glucose and galactose which will be absorbed and produce a rise in blood glucose levels. If the glucose levels don't rise, then there isn't sufficient lactase to properly digest the lactose, indicating lactose intolerance.
- ▶ **Hydrogen Breath Test** -- Similar to the lactose tolerance test, a high-lactose beverage is consumed. The amount of hydrogen in the breath is measured at regular intervals. Normally, there is very little hydrogen, but if the lactose reaches the large intestine without being digested, the fermentation produces hydrogen and other gases. High levels of exhaled hydrogen are an indicator of lactose intolerance.
- ▶ **Stool Acidity Test** -- Undigested lactose that has fermented in the large intestines creates acids that can be detected in a stool sample. This test is often used for infants and children who would otherwise be required to consume an unsafe amount of lactose beverage in a lactose intolerance or hydrogen breath test.

▶ **Do-It-Yourself Test** -- Most people have already connected their symptoms with the ingestion of dairy products. The easiest "do-it-yourself" test is the lactose challenge which involves drinking a quart of skim milk. Within 30 minutes to a couple of hours, bloating and diarrhea will develop in someone who is lactose-intolerant. It is, however, important to get confirmation from your doctor and to be sure that there aren't any concurrent disease, such as irritable bowel disease.

How is lactose intolerance treated?

There is no way to increase lactase production in the small intestine, so dietary modification is the only true way to manage lactose intolerance. Intuitively, avoiding dairy products is the only true way of being symptom-free, however, this is not always feasible or desirable. Also, the amount a dairy that people can tolerate varies greatly. If you are able to tolerate some dairy products, follow these simple suggestions:

- ▶ Drink milk in smaller quantities so as not to overwhelm the little lactase that is present in the small intestine.
- ▶ Drink milk with other foods to slow digestion.
- ▶ Drink soy or rice milk; use non-dairy creamer.
- ▶ Eat hard or aged cheeses (cheddar, swiss, Parmesan, blue) whose lactose has been converted to lactic acid during aging.
- ▶ Try lactose-free products.
- ▶ Avoid hidden sources of lactose.

Milk and milk products are the only foods that contain lactose, but these can be disguised as thickeners in prepared and packaged foods. Look for "whey caseinate", "curds", "lactoglobulin", and "milk products" on the labels of your favorite foods. Some over-the-counter medications and prescription capsules contain enough lactose as a base powder to cause symptoms in people who are highly sensitive.

Hidden Lactose

Breads
Cakes
Pastry
Baking Mixes
Crackers
Cream Soups
Salad Dressings
Canned Meats
Drink Mixes
Dried Foods
Frozen Foods

Personal Health: GALLSTONES

What are gallstones?

Gallstones are small, stone-like substances that form in the gallbladder as a result of excess cholesterol and bilirubin in the bile. Bile is manufactured by the liver and stored in the gallbladder where its function is to help the body digest fats in the small intestine. Bile is comprised of water, cholesterol, fats, proteins, bile salts, and bilirubin. The bile salts break up the fat in foods. Bilirubin, a waste product, gives bile and stool a yellowish-brown color. Bile ducts carry the bile from the liver to the gallbladder and from the gallbladder to and from the small intestines.

Eighty percent of gallstones are comprised of hardened cholesterol ("cholesterol stones") and are yellowish-green in color. The other twenty percent are dark-colored "pigment stones" made of bilirubin. Gallstones range in size from that of a sand grain to a golf ball. A single, large stone can develop or many smaller ones, any of which can move out of the gallbladder, lodge in a duct, and block the flow of bile. If bile builds up in the ducts, gallbladder or liver, it causes inflammation. Long-term blockage can cause infection and severe organ damage; if left untreated, it can be fatal.

Cholesterol gallstones appear to be the result of an imbalance of cholesterol (too much), bilirubin (too much), and bile salts (too little). The cause for the imbalance is unknown. The cause of pigment stones is not understood except for the observations that people with cirrhosis of the liver, biliary tract infections, and some blood disorders such as sickle cell anemia, are more likely to get them.

RISK FACTORS FOR GALLSTONES

- ▶ Being female with "high estrogen situations" (pregnancy, hormone replacement therapy, or birth control pills)
- ▶ Being overweight or obese
- ▶ Chronic fasting or losing a lot of weight quickly
- ▶ Family history
- ▶ Being older than 60
- ▶ Having diabetes
- ▶ American Indian or Mexican American descent
- ▶ Taking cholesterol-lowering medications
- ▶ High fat, high cholesterol, low fiber diet

What are the symptoms?

When a gallstone becomes lodged in a bile duct, it creates pressure in the gallbladder which leads to pain which can often be very intense and may mimic a heart attack. The pain can be steady with increasing intensity in the right upper torso, lasting thirty minutes to several hours; in the back between the shoulder blades; and/or under the right shoulder. This is referred to as a gallbladder "attack" because it comes on suddenly. The symptoms may pass as the gallstone moves.

A gallbladder attack is rarely an isolated event; people who are prone to them require medical treatment. Persistent pain, fever, and yellowing of the skin (jaundice) are warning signs of a more serious problem. If you experience any of the following symptoms, contact your doctor immediately:

- ✓ pain lasting more than 5 hours
- ✓ nausea and vomiting
- ✓ fever or chills
- ✓ yellowing of the skin
- ✓ yellowing of the whites of the eyes
- ✓ clay-colored stool

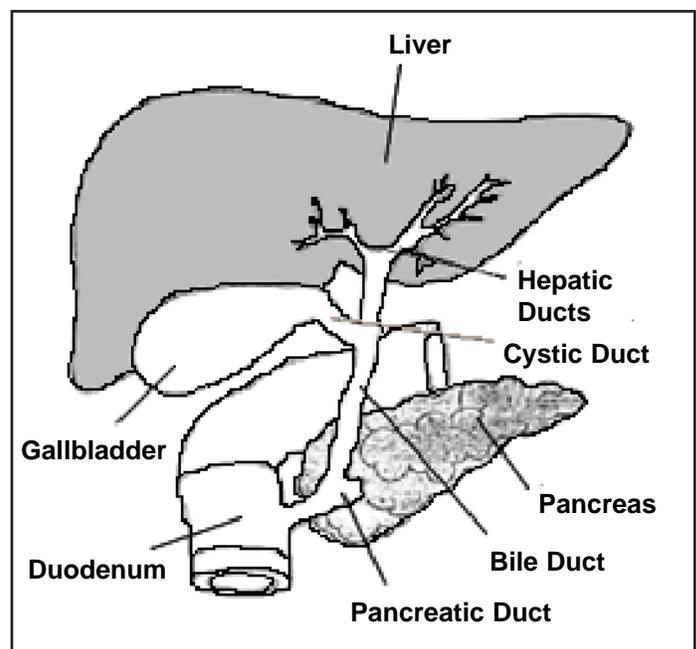


IMAGE SOURCE: National Institute of Diabetes and Digestive & Kidney Diseases

Gallstones *continued from page 6*

How are gallstones diagnosed?

In addition to symptoms of a heart attack, gallstones can also mimic the symptoms of appendicitis, irritable bowel syndrome (IBS), pancreatitis, ulcers, and a hiatal hernia. Therefore, appropriate treatment depends on an accurate diagnosis. An ultrasound is the most specific test, although a CT (computerized tomography) scan, endoscopy, and blood tests may also be utilized to confirm the diagnosis.

How are gallstones treated?

Removing the gallbladder (cholecystectomy) is recommended when a patient has frequent gallbladder attacks. The mere presence of gallstones usually does not indicate surgery. During laparoscopic surgery, the surgeon will make a few tiny incisions in the abdomen and insert a video camera to locate the gallbladder and surrounding organs. He/she will separate the gallbladder from the liver and bile ducts and remove it through one of the incisions. Patients can return home after one night in the hospital and return to normal activity in a few days. If the gallstone is lodged in the bile duct, a flexible scope will be inserted down the throat, through the stomach and small intestine into the duct where it is removed.

What happens after the gallbladder is removed?

The bile flows from the liver through the bile ducts directly into the small intestines. A minor and usually temporary side effect is softer and more frequent bowel movements in approximately one percent of people who have had their gallbladder removed. The gallbladder is considered to be a non-essential organ, and the liver is more than capable of producing enough bile to digest the average person's diet. A low-fat, lower-cholesterol diet is, however, a good recommendation for anyone with or without a gallbladder.



Did You Know?

Cholesterol-lowering medications decrease the amount of cholesterol in the blood but increase the amount secreted into the bile.



The Medicine Cabinet

Aricept® *Treatment of Dementia*

Trade Name: Donepezil (doe nep' e zil)

Drug Classification: cholinesterase inhibitor.

Purpose: improves mental function (memory, attention, reasoning, language skills, social interaction, and ability to perform tasks of daily living) in mild, moderate, and severe dementia related to Alzheimer's disease. Donepezil does not cure Alzheimer's disease.

Action: prevents the breakdown of acetylcholine (a naturally-occurring substance) in the brain.

Dispensing Method: oral tablets taken with or without food once a day at bedtime; orally disintegrating tablets are also available.

Major Precautions: Donepezil can interact with prescription medications as well as over-the-counter antihistamines and anti-inflammatory medications such as aspirin, ibuprofen (Advil), and naproxen (Aleve). Since many patients with Alzheimer's disease also take alternative treatments and nutritional supplements, it is important for the treating physician to be informed. Additionally, it is important for the patient to take the medication exactly as prescribed, which may require help from a caregiver.

Side Effects: nausea; vomiting; diarrhea; loss of appetite; weight loss; frequent urination, joint pain, swelling or stiffness; headache; dizziness; extreme fatigue; drowsiness; confusion; nervousness; depression; behavioral changes; difficulty falling asleep or staying asleep; abnormal dreams; bruising of the skin; red, itchy, scaly skin. If any of the above side effects become worse, the patient's physician should be notified. **SERIOUS:** Donepezil may cause fainting; slowed heartbeat; chest pain; bloody stools; black or tarry stools; bloody vomit; vomit that resembles coffee grounds; difficulty urinating or painful urination; loss of bladder control; low back pain; fever; seizures -- call the doctor immediately.

As with any medication, always follow your doctor's instructions, and if you have any problems, side effects, or questions, follow up with your doctor or pharmacist.

What's the Message?

FOR YOUR DVT AWARENESS:

Avoid sitting for long periods of time to reduce the risk of Deep Vein Thrombosis.

Surviving DVT and a pulmonary embolism depends on getting immediate medical attention.

FOR YOUR DEPRESSION AWARENESS:

Depression is a common cause for disability and lost productivity, both personal and economic.

Regular exercise can help improve the symptoms of depression.

FOR YOUR CALCIUM AWARENESS:

If you are lactose intolerant or follow a vegan diet, there are many excellent non-dairy sources of calcium.

Healthy bones need both calcium and vitamin D. If you are unable to get enough from diet, consider a supplement.

FOR YOUR LACTOSE AWARENESS:

Dietary modifications can ease the unpleasant symptoms of lactose intolerance.

Lactose Intolerance is not life-threatening and does not lead to other medical conditions.

FOR YOUR GALLSTONE AWARENESS:

Gallstones that become lodged in a bile duct can mimic the pain associated with a heart attack.

The gallbladder is a non-essential organ that may be removed if gallstones persist.

Keeping Stress in Check

Consider your mistakes opportunities to learn and grow as a person.

Dear Dr. Liker... Is it true that the West Nile virus has become a permanent health threat in the United States?

Essentially, the West Nile virus is here to stay; it first emerged in the U.S. in 1999. The virus is carried by mosquitoes and the risk of being bitten by an infected mosquito is greatest from July to September when the weather is warm. The virus is dormant during the winter when the mosquito population dies off. However, many cities have warm climates all year round.

Most people who become ill will feel as though they have a mild case of the flu. Older people and people with weakened immune systems have a greater risk of complications, including swelling of the brain (encephalitis). The West Nile virus is not contagious.

Standing water is the ideal place for mosquitoes to breed, so it is important to drain water that may have collected around your home, such as that in gutters, drains, and shallow containers. Wear long sleeve shirts and pants and apply a repellent when you are outdoors. Avoid early morning and early evening hours when mosquitoes are most likely to be out.

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Keeping People Focused on Staying Fit & Healthy



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