

Patient Education



Contents

- Behavioral /Awareness Issues2**
 - Anorexia..... 2
 - Check Up..... 4
 - Check-Up Schedule 5
 - Childhood Immunization..... 7
 - Heartburn..... 10
 - Lung Cancer..... 11
 - Safe Medication Use..... 13
 - Migraine 13
 - Obesity..... 15
 - Testicular Cancer 17
 - Travelers' Diarrhea..... 18
 - Your Way to Healthy Eating..... 20
- Environmental Diseases21**
 - Tobacco 21
 - Outdoor Pollutants 22
- Infectious Diseases.....25**
 - Avian Influenza 25
 - Flu 26
 - Hepatitis A 28
 - HIV/ AIDS 29
 - Renal Failure..... 31
 - West Nile Virus 33
- Chronic Diseases34**
 - Diabetes..... 34
 - Diabetes Type 2 36
 - Hypertension 37
 - Liver Cirrhosis 39

Melanoma.....	41
Osteoporosis.....	42
Rheumatoid Arthritis.....	44

Behavioral /Awareness Issues

Anorexia

Definition

People who initially starve themselves and are still convinced that they are overweight. It is a severe emotional disorder affecting mostly young women in industrial countries, where society says that thin is in. Male athletes and men that are in the military are growing in the number of affected men.

Causes

There is no specific medical cause for this disease but several factors lead up to this eating disorder. Some examples are: Severe trauma or emotional stress during puberty or pre-puberty, abnormalities in brain chemistry especially changes in serotonin levels (the chemical that regulates appetite), cultural environment that puts a high value on skinny people, controlling parents that show no emotional warmth, tendencies toward perfection, and, a family history of the disease.

Risk Factors

- Early onset of puberty
- Living in an industrial country
- Obsessive compulsive disorder
- History of sexual abuse or another traumatic event
- Dieting

Risk Groups

- Teenage and young women
- People who participate in sports and activities that put emphasis on a lean body
- People who have difficulty dealing with stress

Statistics

- 3% of the adolescent and adult women population, in addition of 1% of men experience anorexia nervosa, bulimia nervosa, or any other of eating disorder.
- A young women with anorexia runs 12 times greater risk of dying, than any young women without anorexia.
- Only half of anorexia victims or bulimia can recover in full, only 30% of the victims can reach a fractional recovery, and 20% have no improvement.
- 40% of fourth grade students admitted that they had put themselves through a diet, "very often" or "sometimes".
- More than 5 million of the American population deals with an eating disorder.
- 15% of young women experience "disordered eating attitudes" and conduct.
- Between 90-95% of the anorexia victims are "girls and women".
- Anorexia regularly appears in the early or middle years of adolescence.
- The average woman in the United States is 5'4" and weighs 140 pounds. In contrast, the average United States model is 5'11" and weighs 117 pounds.
- Twenty years ago the average fashion model weighted 8% less than the average women. Today a fashion model weights 23% less than the average women.

Source: [Students Against Destructive Decisions](#) Statistics

Treatment

When tremendous evidences of anorexia are present in a victim, hospitalization may be needed to permit a close dietary supervision. A variety of treatments are offer against anorexia, ranging from "psychotherapy" (family therapy), counseling, self-help groups, medical and no medical practices.

In some cases treatment must be extended, although frequent "regression" may occur. The patient needs to be supported to learn and be aware that it is part of the recovery. According to statistics, recovery is very likely.

Source: Anorexia Treatment

Prevention

There is no way to prevent anorexia, but recognizing early danger signs and looking for a vital treatment can help prevent it. Danger Signs:

- Rejection to maintain appropriate body weight
- Horror to gaining weight
- Chat about "feeling fat"
- Avoid eating "full meals"
- Neurotic concern with own "body size"
- Excessive exercise
- Unhappiness with "physical appearance"
- Personality change from friendly to solitary
- Very little or no "food intake"
- Complicated or no menstrual cycles

Source: [Caring Online](#)

Check Up

Regular health check-ups every 1-3 years, just like visits to the dentist, should be standard procedure in every person's health routine.

Whether you are suffering from a lingering disease, caused by risk factors like high cholesterol or triglyceride levels or high blood sugar, or have acquired habits detrimental to your health, such as smoking, too much alcohol or the wrong diet - preventive medical check-ups are your chance to start treatment early.

Diseases recognized in time are treated far more easily and with fewer negative effects for the patients. This is true for cancer and a number of other common diseases too.

Where to go for preventive medical check-ups?

These check-ups are performed by established medical doctors, or your registered Family Doctor. Contact the clinic and schedule an appointment to keep in mind to inform the office that this is a none-emergency check-up.

Purpose of the periodic health examination

As primary prevention-To identify risk factors for common chronic diseases-To detect disease that has no apparent symptoms (secondary prevention) As a way for the doctor to counsel people to promote healthy behavior-To update clinical data since last checkup-To enhance the relationship between you and your doctor What do check-ups include?

Check-ups may consist of the following:

- blood test
- urinalysis
- scatoscopy, testing for occult blood
- body fat analysis
- pulmonary function test
- electrocardiogram (EKG)
- internistic diagnosis
- blood pressure

The entire program is uncomplicated with no strain or pain on patients.

On the day of your blood test, you arrange for an examination appointment. During the appointment your results are discussed and further recommendations are made. All findings and diagnoses are yours to take home.

Check-Up Schedule

Vaccines to prevent diseases	
Tetanus	Recall every ten years (after making sure that the three first shots were administered).
Hepatitis B	3 shots. The second shot is administered one month or two following the first and the last one after 2 to 4 months.
Rubella	One shot if no immunity. Women, in childbearing period, should consult their physician (if planning to get pregnant, the shot must be administered before two months, preferably before marriage).
Influenza	Yearly after the age of 50, especially if you work in the healthcare sector, in an infirmary or a nursery.
Pneumococcal	Once at the age of 65, if not administered before, to chronic smokers.
Care and periodical check ups	
Clinical exam and healthcare advice	Yearly

Weight watch	Periodically
Dental check up	Yearly
Hearing check up	Periodically after 65.
Eyes check up	Every 3 to 5 years for people with no vision troubles. Should be more frequent after the age of 50. Periodically after 65.

Tests for the early diagnosis of diseases and for health status	
Measuring the blood tension	Yearly
Cholesterol test (HDL, LDL, triglycerides)	<ul style="list-style-type: none"> • At the age of 35 for men. Then every 5 years. • At the age of 45 for women. Then every 5 years. • Before this age if there is a genetic factor.
Diabetes test	Periodically for those prone to diabetes (genetically, obesity, pregnancy diabetes).

Tests for the early diagnosis of cancer	
Skin self-examination	Monthly
Occult blood in feces (3 consecutive days)	At the age of 50. Then, yearly in the absence of a sigmoidoscopy
Rectal exam	At the age of 50. Then every 3-5 years.
Sigmoidoscopy	At the age of 50. Then every 3-5 years (or after 10 years in the event of a colonoscopy).
For men only: Testicular self-examination	Monthly
For women only: Breast self-examination	Monthly, right after the childbearing period
For women only: Breast exam by a health professional	Yearly
For women only: Mammography	Every year or two after 40. Before if there is a heredity factor. Consult your doctor at the age of 70

For women only: Pap smear	Yearly for women sexually active (after three negative results for three consecutive years)
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Recommended Childhood and Adolescent Immunization Schedule UNITED STATES • 2006

Vaccine ▼	Age ▶	Birth	1 month	2 months	4 months	6 months	12 months	15 months	18 months	24 months	4–6 years	11–12 years	13–14 years	15 years	16–18 years
Hepatitis B ¹	HepB	HepB	HepB	HepB ¹	HepB			HepB Series							
Diphtheria, Tetanus, Pertussis ²			DTaP	DTaP	DTaP		DTaP			DTaP	Tdap	Tdap			
<i>Haemophilus influenzae</i> type b ³			Hib	Hib	Hib ³	Hib									
Inactivated Poliovirus			IPV	IPV	IPV			IPV							
Measles, Mumps, Rubella ⁴						MMR		MMR		MMR					
Varicella ⁵						Varicella		Varicella							
Meningococcal ⁶								MPSV4			MCV4		MCV4		
Pneumococcal ⁷			PCV	PCV	PCV	PCV		PCV		PPV					
Influenza ⁸					Influenza (Yearly)			Influenza (Yearly)							
Hepatitis A ⁹								HepA Series							

This schedule indicates the recommended ages for routine administration of currently licensed childhood vaccines, as of December 1, 2005, for children through age 18 years. Any dose not administered at the recommended age should be administered at any subsequent visit when indicated and feasible. Indicates age groups that warrant special effort to administer those vaccines not previously administered. Additional vaccines may be licensed and recommended during the year. Licensed combination vaccines may be used whenever

any components of the combination are indicated and other components of the vaccine are not contraindicated and if approved by the Food and Drug Administration for that dose of the series. Providers should consult the respective ACIP statement for detailed recommendations. Clinically significant adverse events that follow immunization should be reported to the Vaccine Adverse Event Reporting System (VAERS). Guidance about how to obtain and complete a VAERS form is available at www.vaers.hhs.gov or by telephone, 800-822-7967.

 Range of recommended ages Catch-up immunization 11–12 year old assessment

- Hepatitis B vaccine (HepB).** *AT BIRTH:* All newborns should receive monovalent HepB soon after birth and before hospital discharge. **Infants born to mothers who are HBsAg-positive** should receive HepB and 0.5 mL of hepatitis B immune globulin (HBIG) within 12 hours of birth. **Infants born to mothers whose HBsAg status is unknown** should receive HepB within 12 hours of birth. The mother should have blood drawn as soon as possible to determine her HBsAg status; if HBsAg-positive, the infant should receive HBIG as soon as possible (no later than age 1 week). **For infants born to HBsAg-negative mothers,** the birth dose can be delayed in rare circumstances but only if a physician's order to withhold the vaccine and a copy of the mother's original HBsAg-negative laboratory report are documented in the infant's medical record. *FOLLOWING THE BIRTHDOSE:* The HepB series should be completed with either monovalent HepB or a combination vaccine containing HepB. The second dose should be administered at age 1–2 months. The final dose should be administered at age ≥24 weeks. It is permissible to administer 4 doses of HepB (e.g., when combination vaccines are given after the birth dose); however, if monovalent HepB is used, a dose at age 4 months is not needed. **Infants born to HBsAg-positive mothers** should be tested for HBsAg and antibody to HBsAg after completion of the HepB series, at age 9–18 months (generally at the next well-child visit after completion of the vaccine series).
- Diphtheria and tetanus toxoids and acellular pertussis vaccine (DTaP).** The fourth dose of DTaP may be administered as early as age 12 months, provided 6 months have elapsed since the third dose and the child is unlikely to return at age 15–18 months. The final dose in the series should be given at age ≥4 years. **Tetanus and diphtheria toxoids and acellular pertussis vaccine (Tdap – adolescent preparation)** is recommended at age 11–12 years for those who have completed the recommended childhood DTP/DTaP vaccination series and have not received a Td booster dose. Adolescents 13–18 years who missed the 11–12 year Td/Tdap booster dose should also receive a single dose of Tdap if they have completed the recommended childhood DTP/DTaP vaccination series. Subsequent **tetanus and diphtheria toxoids (Td)** are recommended every 10 years.
- Haemophilus influenzae* type b conjugate vaccine (Hib).** Three Hib conjugate vaccines are licensed for infant use. If PRP-DMP (PedvaxHIB® or ComVax® [Merck]) is administered at ages 2 and 4 months, a dose at age 6 months is not required. DTaP/Hib combination products should not be used for primary immunization in infants at ages 2, 4 or 6 months but can be used as boosters after any Hib vaccine. The final dose in the series should be administered at age ≥12 months.
- Measles, mumps, and rubella vaccine (MMR).** The second dose of MMR is recommended routinely at age 4–6 years but may be administered during any visit, provided at least 4 weeks have elapsed since the first dose and both doses are administered beginning at or after age 12 months. Those who have not previously received the second dose should complete the schedule by age 11–12 years.

- Varicella vaccine.** Varicella vaccine is recommended at any visit at or after age 12 months for susceptible children (i.e., those who lack a reliable history of chickenpox). Susceptible persons aged ≥13 years should receive 2 doses administered at least 4 weeks apart.
- Meningococcal vaccine (MCV4).** Meningococcal conjugate vaccine (MCV4) should be given to all children at the 11–12 year old visit as well as to unvaccinated adolescents at high school entry (15 years of age). Other adolescents who wish to decrease their risk for meningococcal disease may also be vaccinated. All college freshmen living in dormitories should also be vaccinated, preferably with MCV4, although meningococcal polysaccharide vaccine (MPSV4) is an acceptable alternative. Vaccination against invasive meningococcal disease is recommended for children and adolescents aged ≥2 years with terminal complement deficiencies or anatomic or functional asplenia and certain other high risk groups (see *MMWR* 2005;54 [RR-7]:1-21); use MPSV4 for children aged 2–10 years and MCV4 for older children, although MPSV4 is an acceptable alternative.
- Pneumococcal vaccine.** The heptavalent pneumococcal conjugate vaccine (PCV) is recommended for all children aged 2–23 months and for certain children aged 24–59 months. The final dose in the series should be given at age ≥12 months. **Pneumococcal polysaccharide vaccine (PPV)** is recommended in addition to PCV for certain high-risk groups. See *MMWR* 2000; 49(RR-9):1-35.
- Influenza vaccine.** Influenza vaccine is recommended annually for children aged ≥6 months with certain risk factors (including, but not limited to, asthma, cardiac disease, sickle cell disease, human immunodeficiency virus [HIV], diabetes, and conditions that can compromise respiratory function or handling of respiratory secretions or that can increase the risk for aspiration), healthcare workers, and other persons (including household members) in close contact with persons in groups at high risk (see *MMWR* 2005;54 [RR-8]:1-55). In addition, healthy children aged 6–23 months and close contacts of healthy children aged 0–5 months are recommended to receive influenza vaccine because children in this age group are at substantially increased risk for influenza-related hospitalizations. For healthy persons aged 5–49 years, the intranasally administered, live, attenuated influenza vaccine (LAIV) is an acceptable alternative to the intramuscular trivalent inactivated influenza vaccine (TIV). See *MMWR* 2005;54(RR-8):1-55. Children receiving TIV should be administered a dosage appropriate for their age (0.25 mL if aged 6–35 months or 0.5 mL if aged ≥3 years). Children aged ≤8 years who are receiving influenza vaccine for the first time should receive 2 doses (separated by at least 4 weeks for TIV and at least 6 weeks for LAIV).
- Hepatitis A vaccine (HepA).** HepA is recommended for all children at 1 year of age (i.e., 12–23 months). The 2 doses in the series should be administered at least 6 months apart. States, counties, and communities with existing HepA vaccination programs for children 2–18 years of age are encouraged to maintain these programs. In these areas, new efforts focused on routine vaccination of 1-year-old children should enhance, not replace, ongoing programs directed at a broader population of children. HepA is also recommended for certain high risk groups (see *MMWR* 1999; 48(RR-12):1-37).

Recommended Immunization Schedule for Children and Adolescents Who Start Late or Who Are More Than 1 Month Behind

UNITED STATES • 2006

The tables below give catch-up schedules and minimum intervals between doses for children who have delayed immunizations. There is no need to restart a vaccine series regardless of the time that has elapsed between doses. Use the chart appropriate for the child's age.

CATCH-UP SCHEDULE FOR CHILDREN AGED 4 MONTHS THROUGH 6 YEARS					
Vaccine	Minimum Age for Dose 1	Minimum Interval Between Doses			
		Dose 1 to Dose 2	Dose 2 to Dose 3	Dose 3 to Dose 4	Dose 4 to Dose 5
Diphtheria, Tetanus, Pertussis	6 wks	4 weeks	4 weeks	6 months	6 months¹
Inactivated Poliovirus	6 wks	4 weeks	4 weeks	4 weeks²	
Hepatitis B ³	Birth	4 weeks	8 weeks (and 16 weeks after first dose)		
Measles, Mumps, Rubella	12 mo	4 weeks⁴			
Varicella	12 mo				
<i>Haemophilus influenzae</i> type b ⁵	6 wks	4 weeks if first dose given at age <12 months	4 weeks⁵ if current age <12 months	8 weeks (as final dose) This dose only necessary for children aged 12 months–5 years who received 3 doses before age 12 months	
		8 weeks (as final dose) if first dose given at age 12–14 months	8 weeks (as final dose)⁶ if current age ≥12 months and second dose given at age <15 months		
Pneumococcal ⁷	6 wks	4 weeks if first dose given at age <12 months and current age <24 months	4 weeks if current age <12 months	8 weeks (as final dose) This dose only necessary for children aged 12 months–5 years who received 3 doses before age 12 months	
		8 weeks (as final dose) if first dose given at age ≥12 months or current age 24–59 months	8 weeks (as final dose) if current age ≥12 months		
		No further doses needed if first dose given at age ≥15 months	No further doses needed if previous dose given at age ≥15 mo		
		No further doses needed for healthy children if first dose given at age ≥24 months	No further doses needed for healthy children if previous dose given at age ≥24 months		

CATCH-UP SCHEDULE FOR CHILDREN AGED 7 YEARS THROUGH 18 YEARS			
Vaccine	Minimum Interval Between Doses		
	Dose 1 to Dose 2	Dose 2 to Dose 3	Dose 3 to Booster Dose
Tetanus, Diphtheria ⁸	4 weeks	6 months	6 months if first dose given at age <12 months and current age <11 years; otherwise 5 years
Inactivated Poliovirus ⁹	4 weeks	4 weeks	IPV^{2,3}
Hepatitis B	4 weeks	8 weeks (and 16 weeks after first dose)	
Measles, Mumps, Rubella	4 weeks		
Varicella ¹⁰	4 weeks		

- DTaP.** The fifth dose is not necessary if the fourth dose was administered after the fourth birthday.
- IPV.** For children who received an all-IPV or all-oral poliovirus (OPV) series, a fourth dose is not necessary if third dose was administered at age ≥4 years. If both OPV and IPV were administered as part of a series, a total of 4 doses should be given, regardless of the child's current age.
- HepB.** Administer the 3-dose series to all children and adolescents <19 years of age if they were not previously vaccinated.
- MMR.** The second dose of MMR is recommended routinely at age 4–6 years but may be administered earlier if desired.
- Hib.** Vaccine is not generally recommended for children aged ≥5 years.

- Hib.** If current age <12 months and the first 2 doses were PRP-OMP (Pedvax-HIB® or ComVax® [Merck]), the third (and final) dose should be administered at age 12–15 months and at least 8 weeks after the second dose.
- PCV.** Vaccine is not generally recommended for children aged ≥5 years.
- Td.** Adolescent tetanus, diphtheria, and pertussis vaccine (Tdap) may be substituted for any dose in a primary catch-up series or as a booster if age appropriate for Tdap. A five-year interval from the last Td dose is encouraged when Tdap is used as a booster dose. See ACIP recommendations for further information.
- IPV.** Vaccine is not generally recommended for persons aged ≥18 years.
- Varicella.** Administer the 2-dose series to all susceptible adolescents aged ≥13 years.

Report adverse reactions to vaccines through the federal Vaccine Adverse Event Reporting System. For information on reporting reactions following immunization, please visit www.vaers.hhs.gov or call the 24-hour national toll-free information line 800-822-7967. Report suspected cases of vaccine-preventable diseases to your state or local health department.

For additional information about vaccines, including precautions and contraindications for immunization and vaccine shortages, please visit the National Immunization Program Website at www.cdc.gov/nip or contact 800-CDC-INFO (800-232-4636) (In English, En Español — 24/7)

Heartburn

Definition

A pain behind the breast bone, often described as 'burning' in quality. Pain can also be felt at the same level in the mid-line of the back. Most people suffer from heartburn at one time or another. In fact heartburn has nothing to do with the heart - it is a digestive problem. Heartburn is generally related to meals and posture and can often be relieved by remedies for indigestion.

Cause

Acid is present in the stomach to digest food. Heartburn occurs when small amounts of this acid rise up into the gullet (esophagus) - the tube which carries food from the mouth to the stomach. This is called reflux. The gullet, unlike the stomach, does not have a protective lining. So when it is exposed to the acid, it can become inflamed and painful.

Prevention

The most important and helpful aspects of treatment are those which you can do for yourself.

- Stop Smoking-After a meal, when the stomach is full, smoking increases the chances that you will suffer from heartburn.
- Avoid becoming overweight-For many patients weight reduction is the most important remedy. It is worth trying to improve your eating habits. Include more fruit, vegetables and high-fiber foods in your diet. Regular exercise can also help you to lose weight. Posture-Avoid bending from the waist or stooping just after meals. Instead, try and bend from the knees, keeping the back straight. Meals are better taken while sitting on an upright chair rather than slumped in front of the television.
- Diet-You may find particular foods can make your symptoms worse. These might include: acidic fruit drinks, drinks which are too hot, spirits (such as whiskey and brandy), or fatty and spicy meals. It is better to eat 'little and often', fill but do not over-fill the stomach. Food should be eaten slowly and chewed well.
- Sleeping-Let your evening meal digest well before you go to bed. Night-time symptoms can also be reduced by raising the head of the bed on blocks by 6 inches. Gravity helps to keep the acid in the stomach where it should be. Some people are helped by sleeping on their left side.
- Posture-Avoid bending from the waist or stooping just after meals. Instead, try and bend from the knees, keeping the back straight.

Meals are better taken while sitting on an upright chair rather than slumped in front of the television.

- Clothing-Avoid tight belts and underclothes as they increase pressure on the stomach.
- Pregnancy-It is common for pregnant women to suffer from heartburn. By eating sensibly and keeping your weight increase within the recommended limits, you can lessen the severity of heartburn.

Lung Cancer

Definition

"Lung cancer is a disease in which cancer cells grow in the lungs". It happens when the body stops making healthy cells and abnormal cells starts growing in the body system. These abnormal cells reproduce themselves and starts growing and dividing out of control over good cells, forming mass of tissue called "a growth or tumor". The word "cancers" refers to the meaning of "malignant tumors" that spread throughout the body system.

Risk Factors

* Lung disease such as Tuberculosis: the cause of scarring of the lung tissue.

*Personal Lung Cancer History: once the person is diagnosed with lung cancer, reoccurrence risk is higher than for those who have never had lung cancer.

* Pollution: the risk of living in highly polluted cities is similar to the risk associated with non-smokers being exposed to second hand smoke over a long period of time.

* Agents Encountered in Industrial Settings: adding together Asbestos and Radon, yet, still are other cancer causing agents (carcinogens), which are a great danger in the workplace. People at risk include workers being exposed to breathe such chemicals.

* Age: It is rare to treat young people with Lung Cancer, although its risk increases by age 40.

* Gender: American men reflect a higher risk of Lung Cancer than American women, thus their smoking habits differ in intensity.

Statistics and Risk Groups

Lung Cancer deaths are more common than we think, in both men and women. According to 2002 "most recent year for which statistics are currently available", Lung Cancer reports higher increase in deaths among breast cancer, prostate cancer, and colon cancer.

According to the Department of Health and Human Services in 2002:

*100,099 males and 80,163 females were diagnosed with Lung Cancer.

*90,121 males and 67,509 females died from Lung Cancer.

Lung Cancer is the second type of cancer among males living in the United States, and the second most common cancer among White, American Indian and Alaska Native females. The third most common cancer ranks among Black, Asian, Pacific Islander and Hispanic females.

Treatment

Nowadays, diverse alternatives exist to treat cancer, depending on the level of stage of the tumor. After the cancer has being found and diagnosed, a health care team will talk about the best treatment option for the patient.

Lung Cancer treatment can be administered using a single therapy method or in combination depending of the advancement of the tumor.

*Surgery: is used to remove cancerous lung tissue within the lung.

*Chemotherapy: in some cases this option is used as the primary Lung Cancer treatment, in combination with surgery. Chemotherapy is mainly anticancer medication given directly into the vein or by mouth.

* Radiation: high doses of radiation are given to exterminate cancer cells from outside of the body. This type of radiation therapy is applied on lung cancer patients whose health is fragile.

Prevention

Believe it or not, lung cancer is one of the most "miserable" cancers a human being can suffer, but also, lung cancer is one of the most "preventable" ones. Protective factors help decrease the chances of lung cancer.

- Number one thing to do is smoking- your body will thank you for it.
- Fruits and vegetable more often- rich in antioxidants help repair damaged cells in your body system.
- Test your home- a tasteless, odorless gas occurs naturally in the soil. Your house might have been built in an exposed area.
- Avoid or limit exposure- chemicals such as gas, diesel, arsenic, vinyl or other type are consider carcinogens and can be a great risk for developing lung cancer.

- Run away from second hand smoke- carcinogens in cigarette smoke decrease healthy cell growth.

Smoke Free El Paso

[American Lung Association](#)

[CDC](#)

Safe Medication Use

Your doctors, nurses and pharmacists work hard to keep you healthy, but you are also responsible. Learn what questions to ask.

- Make a list of medications you are taking now. Include the dose, how often you take them, the imprint on each tablet or capsule, and the name of the pharmacy. The imprint can help you identify a drug when you get refills.
- Any time that your medications change, change your list, too. Double-check the imprints on the tablets and capsules.
- Also list your medication and food allergies, and any over-the-counter medications, vitamins, nutritional supplements or herbal products that you take regularly.
- Keep medications in their original containers. Many pills look alike, so by keeping them in their original containers, you will know which is which and how to take them.
- Never take someone else's medication. You don't know if it will interact with your medications, the dose may be wrong for you, or you may be allergic to it.
- Read the label every time you take a dose to make sure you have the right drug and that you are following the instructions.
- Turn on the lights to take your medications. If you can't see what you're taking, you may take the wrong thing.
- Don't store medications in the bathroom medicine cabinet or in direct sunlight. Humidity, heat and light can affect medications' potency and safety.

Migraine

Definition

A migraine is a very painful neurological condition of which the most common symptom is a very intense headache. Usually the headache is on one side of the brain.

Cause

Originally it was thought that migraines were caused by abnormalities of blood vessel systems in the head. Today, experts believe that migraines are caused by a disorder in the central nervous system. Many stimuli can cause a chain of neurological and biochemical events. These events cause the blood vessels to constrict and cause less blood flow to the brain.

This is what causes the throbbing pain in the head. A second probable cause of migraines is a problem found within the cells channels that send electrical ions, calcium, magnesium, sodium, and potassium. The calcium channel is what is in charge of the release of serotonin. Serotonin is an important neurotransmitter in the migraine process. Reduced magnesium levels also have a part in migraines.

A drop in magnesium levels is what is responsible for the auras during a migraine. Estrogen fluctuations in women are also a cause of migraines. Women report getting migraines right before a menstrual cycle.

Risk Factors

- Emotional stress
- Low or high blood pressure
- Physical exertion
- Lack of sleep
- Sudden weather changes
- Bright lights
- High altitudes
- Low sugar levels
- Certain foods (cheese, chocolate, alcohol, fatty foods)
- Travel motion
- Hormones
- Medication

Symptoms

Everyone experiences different symptoms. Some symptoms include

- Pain on one side or both sides of the head or pain in the lower back part of the head
- Sensitivity to light and sound
- Nausea with or without vomiting
- Auras

- Blurred vision
- Seeing flashing or twinkling lights
- Tingling sensations in the limbs
- Cravings for sweets
- Being thirsty
- Feeling depressed
- Irritability
- Drowsiness

Treatment

Treatment can consist of anything from over the counter medicine to prescription drugs. There are pain relieving medications and there are medications that prevent the occurrence and severity of the migraine.

Over the counter pain medications are Ibuprofen, aspirin, Naproxen sodium (aleve). If these are not effective the physician may prescribe a prescription strength pain reliever like Triptan. Alternative medications are also available like acupuncture and massage. Herbs, vitamins, and minerals are also a way to treat migraines and other headaches.

Prevention

Prevention comes in the form of medications. Preventative medications include cardiovascular drugs or beta blockers, even though these medications reduce high blood pressure and heart disease, they can also reduce the amount of migraine. Antidepressants and anti-seizure medication are also effective in preventing migraines.

Statistics

- Migraines affect 28 million Americans roughly 21 million are women
- Half of migraine sufferers get their first migraine by the age 20
- About 57% of neurologists get migraines sometime in their life
- 85% of migraine sufferers have reported something that triggers the migraines
 - Up to 50% weather
 - 40% missing a meal
 - 50% stress
 - 50% alcohol

Sources Relieve Migraine Headaches

Definition

Obesity is a disease that affects nearly one third of the American adult population. It has been on the rise since the 1960's and is not slowing down. To be considered obese you have to have a BMI (body mass index) of 30 or more.

Causes

There are many causes that contribute to obesity. Some people have a genetic tendency to store more fat than others. Another leading cause is the environmental factors of the individual. If the individual is not in an environment that promotes health they will have no knowledge of what kinds of healthy foods to eat or that they should exercise.

Risk Factors

- Weight gain increases with age
- Family History of obesity
- Eating high calorie foods
- Inactivity
- Overeating to cope with problems

Risk Groups

- Smokers
- Pregnant women
- People who consume a lot of alcohol
- People who are taking antidepressants

Treatment

Obesity is easily treated by losing weight. You can achieve weight loss by diet and exercise, or by gastric bypass surgery.

Prevention

To prevent becoming obese maintain healthy eating habits and maybe try to improve your healthy eating patterns. Make sure you get regular exercise.

Statistics

- Men and women equally are at risk for becoming obese
- About one-third of adult Americans are obese
- 15.3 percent of children between the ages of 6 and 11 and 15.5 percent of children ages 12 through 19 were overweight in the year 2000

Testicular Cancer

Testicular cancer is a disease that occurs when abnormal cells in the testicles (testes) begin to grow in an uncontrolled manner.

Risk Factors

The exact cause for testicular cancer is yet unknown, however here are several conditions that may increase your risk:

- Cryptorchidism (undescended testicle)
- Infertility
- Klinefelter syndrome
- Family history
- Multiple atypical nevi
- HIV infection
- Carcinoma in situ
- Cancer of the other testicle
- Age
- Race and ethnicity
- Body size

Symptoms

- A noticeable change in the size or shape of one of both testes, either with or without pain.
- A feeling of heaviness in the scrotum.
- A dull pressure or pain in the lower back, abdomen, and/or groin.

How is Testicular cancer diagnosed?

- Medical history and physical exam
- Testicular ultrasound
- Blood tests
- Imaging tests: CT or CAT scan

Treatment

Common methods used to treat testicular cancer include:

- Radical inguinal orchiectomy
- Chemotherapy

- Radiation therapy

Prevention

Performing a monthly testicular self-exam can be used as a preventive measure. The best time to perform the self-exam is during or after a bath or shower when the skin of the scrotum is relaxed. To perform a testicular self-exam you:

- You hold the penis out of the way and examine each testicle separately.
- Hold the testicle between the thumbs and fingers with both hands and roll it gently between the fingers.
- Look and feel for any hard lumps or nodules (smooth rounded masses) or any change in the size, shape, or consistency of the testes.

Interventions

- A cancer related check-up is recommended every 3 years for men aged 20-40 years or older.
- Keep yourself as healthy as possible.
- Be alert to changes in your body.
- Don't put off seeing your doctor if you detect any changes.

Statistics

- The American Cancer Society estimates that about 8,250 new cases of testicular cancer will be diagnosed during 2006 in the U.S.
- An estimated 370 men will die of testicular cancer in 2006.
- According to the National Cancer Institute, the 5 year survival rate for all men with this cancer is over 96%.
- There are nearly 140,000 men who have survived testicular cancer in the U.S.

Travelers' Diarrhea

Definition

Description Travelers' diarrhea (TD) is a clinical syndrome resulting from microbial contamination of ingested food and water; it occurs during or shortly after travel, most commonly affecting persons traveling from an area of more highly developed hygiene and sanitation infrastructure to a less developed one. In this syndrome, vomiting may predominate, and symptoms usually resolve within 12-18 hours.

Risk Factors

The most important determinant of risk is travel destination, and there are regional differences in both the risk and etiology of diarrhea. The world map is generally divided into three grades of risk: high, intermediate, and low. Low-risk countries include the USA, Canada, Australia, New Zealand, Japan, and countries in Northern and Western Europe. Intermediate-risk countries include those in Eastern Europe, South Africa, and some of the Caribbean islands. High-risk areas include most of Asia, the Middle East, Africa, and Central and South America. Some destinations that were previously considered high risk have now been classified as low or intermediate risk, including parts of Southern Europe and some of the Caribbean islands. On average, 30%-50% of travelers to high-risk areas will develop TD during a 1- to 2-week stay. Based on the annual figure of 50 million travelers to developing countries, this estimate translates to approximately 50,000 cases of TD each day. In more temperate regions, there may be seasonal variations in diarrhea risk. In South Asia, for example, during the hot months preceding the monsoon, much higher TD attack rates are commonly reported.

Risk Groups

Travelers' diarrhea occurs equally in males and females and is more common in young adults than in older people. In short-term travelers, bouts of TD do not appear to protect against future attacks, and more than one episode of TD may occur during a single trip.

Prevention

For travelers to high-risk areas, several approaches may be recommended, which can minimize but never completely eliminate the risk of TD. These include Care in selecting food and beverages for consumption may minimize the risk for acquiring TD. Travelers should be advised to eat foods that are freshly cooked and served piping hot and avoid water and beverages diluted with water (reconstituted fruit juices, ice, milk, and bottled water) and foods washed in water, such as salads. Other risky foods include raw or undercooked meat and seafood and raw fruits and vegetables. Safe beverages include those that are bottled and sealed or carbonated. Boiled beverages and those appropriately treated with iodine or chlorine might also be safely consumed. Studies of TD risk at high-risk destinations show that consumption of food or beverages from street vendors poses a particularly high risk, and some studies suggest certain food items such as reheated prepared foods or buffet items are also high risk.

Statistics

Infectious diarrhea diseases for the United States are the following according to the National Digestive Diseases Information Clearinghouse (NDDIC).

- There were 16 million new cases in 1996.
- A count of 2,481 deaths in 2002.
- Hospitalization cases ranged from 375,000 to 777,000 in 2002. Doctor visits among 8 to 12 million in 1985.
- Prescribed patients ranged from 5 to 8 million in 1985.

Reference: www.cdc.org

HE WHO HAS HEALTH HAS HOPE; AND HE WHO HAS HOPE HAS EVERYTHING.

Arabian Proverb

Your Way to Healthy Eating

Planning a road trip? How about planning your meals and snacks too? Dig out that cooler and create some heart-healthy meals and snacks. Your healthy body will thank you.

Meals

Rather than stopping for fast food, try these options:

Whole grain bagel with 1 tbsp. light cream cheese, 1 tbsp. peanut butter, a slice of low-fat cheese, or

2 slices of whole grain bread with 1 tsp. mustard or light mayonnaise and 2 to 3 oz. of fresh turkey.

Whole-wheat pita with 2 tbsp. humus topped with grated carrot and lettuce. Spread a whole-wheat tortilla with 1 tbsp. light cream cheese or bean dip, and then add grated carrot, lettuce, or other vegetables. Roll the tortilla and slice it crosswise into bite-size pinwheels.

Hint: Cut sandwiches into halves or quarters for easier eating.

Snacks

Fresh Fruit: Seedless grapes, sliced apples (dipped in lemon juice to prevent browning), peeled and segmented oranges, bananas. Fresh Vegetables: Baby carrots, celery sticks, broccoli and cauliflower florets, red and green pepper slices. Breads/Cereals: Pretzels, mini rice cakes, sesame breadsticks, low-sugar dry cereal, animal crackers, graham crackers, vanilla wafers, fig bars.

Make Your Own Trail Mix: Bite-size low-sugar cereal, dried fruit, and unsalted nuts (in moderation).

Don't forget to pack some bottled water, low-sodium vegetable juice, or 100% fruit juice for your beverages - and off you go!

Environmental Diseases

Tobacco

Definition

A plant which its leaves have high levels of the addictive chemical nicotine. The leaves can be smoked in cigarettes, cigars, and smoking pipes, put on the gums for dipping and chewing tobacco, or to breathe in as snuff. The leaves possess several cancer-causing chemicals, and the use of tobacco and the contact with secondhand tobacco smoke have been related to various types of cancer and other diseases.

Source: National Cancer Institute

Health Effects in Hispanics

According to the Tobacco Information and Prevention Source smoking is the result for 87% of lung cancer deaths in the United States. Inclusive, lung cancer is the foremost cause of cancer deaths among Hispanics. Lung cancer deaths are about three times higher for Hispanic men (23.1 per 100,000) than for Hispanic women (7.7 per 100,000).

The rate of lung cancer deaths per 100,000 was found to be higher among Cuban American men (33.7) than among Puerto Rican (28.3) and Mexican American (21.9) men.

Coronary heart disease is the principal cause of death for Hispanics living in the United States. Among Hispanic subgroups in 1992-1994, death count for coronary heart disease were 82 per 100,000 for Mexican American men and 44.2 per 100,000 for Mexican American women, 118.6 per 100,000 for Puerto Rican men and 67.3 per 100,000 for Puerto Rican woman, and 95.2 per 100,000 for Cuban men and 42.4 per 100,000 for Cuban women.

Source: National Cancer Institute. Information last reviewed on January 2005.

Causes of Smoking

Tobacco smoking causes several types of cancers, such as: cancer of the mouth, throat, larynx, lung esophagus, pancreas, kidney, and bladder. Smoking also causes cancer of the stomach, cervix, kidneys, pancreas, and acute myeloid leukemia (cancer in the blood).

Cigarette smoking is the primary cause of lung cancer. People who smoke are at about 20 times more likely to develop lung cancer than nonsmokers. Smoking cigarettes causes about 90% of lung cancer deaths in men and almost 80% in women.

Utilizing both cigarettes and alcohol increases the causes of larynx cancer. Some chemicals in tobacco smoke can harm important genes that control the growth of cells and lead to cancer.

Outdoor Pollutants

Air Pollution

Air pollution is mainly made up of many kinds of gases, droplets and chemical particles that reduce the quality of the air. Air can be polluted in both the city and the country.

Causes

- Smog contributes greatly to the outdoor environment pollution. It is caused by chemical elements resulting from diverse sources, principally driving vehicles and manufacturing emission. Cities are regularly the heart of these doings, so many suffer from these chemical effects, particularly in the summer months of the year.
Source: Air Quality Management District in southern California

- The precise cause of pollution may be different for each city. It depends very much on the physical location, temperature, wind and weather factors, so pollution is dispersed dissimilar. However, this does not happen and the pollution can build up to unsafe intensity. A temperature inversion happens “when air close to the earth is cooler than the air above it. Under these conditions the pollution cannot rise and be dispersed”. For example, cities enclosed by mountain terrains can entrap pollution. Inversion is very likely to happen in any season on the year. Winter inversion is common to cause carbon monoxide pollution throughout the surroundings. Summer inversion is more likely to create smog.
- Another type of outdoor air pollution is acid rain. “When a pollutant, such as sulfuric acid combines with droplets of water in the air, the water (or snow) can become acidified”. The result of acid rain on the atmosphere can be very serious. It harms plants “by destroying their leaves, it poisons the soil, and it changes the chemistry of lakes and streams. Damage due to acid rain kills trees and harms animals, fish, and other wildlife”. Source: U.S. Geological Survey, Environmental Protection Agency, Environment Canada
- The greenhouse effect, also known as global warming, is considered to come from the increase of carbon dioxide gas in the atmosphere. Carbon dioxide created when petroleum, firewood, oil, coal, and gas are burned. The plants are responsible for converting carbon dioxide back to oxygen, but unfortunately the discharge of carbon dioxide from human doings is higher than the world’s plants can handle. The condition is becoming worst since a lot of the world’s forests are being cut off, and plant life is being damaged by acid rain. Therefore, the amount of carbon dioxide in the air is continuing to increase. This phenomenon performs like if it were like a blanket, locking in heat close to the surface of our earth. If even small changes of a few degrees happen, it will affect us all resulting in drastic “changes in the climate and even the possibility that the polar ice caps may melt”. One of the effects of polar ice cap melting would be an increase in sea level, producing widespread coastal flooding. Source: Environmental Defense Fund, Science Education Academy of Bay Area, Society of Environmental Journalists
- Ozone depletion is another effect of pollution. All the chemicals liberated by human activities affect the “stratosphere”, one component of the atmospheric layers here on earth. The ozone layer in the atmosphere is responsible for protecting the earth from harmful ultraviolet rays coming straight from the sun. Chemical discharge of “chlorofluorocarbons” from aerosol cans, cooling systems and refrigerator equipment removes some of the ozone, resulting in “holes”, which open up the ozone layer and allows the radiation to get

in contact with the earth. Ultraviolet rays are extremely dangerous since they cause skin cancer and has harmful effects on plants and wildlife. Source: National Oceanic and Atmospheric Administration and Ozone Action

Symptoms of air pollution

It is very common for the eyes to get irritated, throat and lungs. A burning eye sensation, coughing and chest tightness are very ordinary to experience due to high levels of air pollution. All people respond very differently to air pollution. Some people suffer from chest tightness or coughing, while other people may not be aware of any side effects. Exercising requires faster and deeper breathing, so symptoms may be worst. People suffering with heart disease, such as chest pain, or any other lung disease, such as asthma or emphysema, may be more susceptible to outdoor pollution, and may be aware of the symptoms more easily when other do not. Source: American Academy of Family Physicians

Risk Groups

Children are more sensitive to the effects of air pollution than other people. Children are more susceptible to lower levels of outside pollution than adults. They are also more vulnerable to illness, such as bronchitis and earaches, in regions of high pollution than in regions with cleaner air. Source: American Academy of Family Physicians

Protection

Be aware of high-risk weather conditions, such as hot, sunny days, and you start to improve symptoms like chest tightness, burning eyes or a cough. Take action to protect yourself and your family from the consequences of outdoor pollution by following the next prevention tips:

- Hang indoors as much time as you can during those days when air pollution is higher in level.
- If you have to go outside, try to do your activities in the early morning hours or postpone them after the sunset. This is very vital, especially in large cities because sunshine increases ozone levels.
- "Do not exercise or put yourself outdoors when air-quality reports indicate unhealthy conditions". Have in mind that the faster and deeper you breathe the more pollution you are inhaling into your lungs. These simple steps will normally decrease the symptoms in healthy people. But if you live or work close to a manufacturing structure, or if you suffer from a chronic heart or lung condition, talk to your doctor and find out other ways to protect yourself and loved ones. Source: American Academy of Family Physicians

Increasing Clean Air

- "Modify your transportation" - vehicles contribute greatly to air pollution, so consider substituting your car to a more-efficient one.
- "Conserve energy" - energy use transform into air pollution, so consider using it wisely to avoid negative effects in our environment.
- "Reduce waste" - The making of needless items or throwaway supplies generally produces air pollution, so "reduce, reuse, repair, recycle".
- "Eliminate toxic chemical use at home" - A numerous household cleaning items are poisonous and volatile. Many of these items discharge vapors into the air, indoors and outdoors. This can be very dangerous for your family health and unsafe for the community.
- "No burn barrels"
- "Cut back or eliminate lawn mowing"
- "Plant leafy trees and shrubs"
- "Limit your family size"
- "Get involve and talk to your legislators"

Infectious Diseases

Avian Influenza

Definition

The Avian Influenza is usually natural in wild birds. It becomes harmful when transmitted to domestic birds. It is hard to prevent contamination of domestic birds because it is highly contagious among birds and is transmitted through saliva, nasal secretions, and feces. If this virus ever changes form to a string that is highly contagious among humans, there will be a pandemic.

Cause

This virus is caused by the influenza virus that infected birds. The H5N1 string is passed from bird to bird. Manure, bird feed, equipment, vehicles, egg flats, and crates become contaminated with the virus through the feces of the bird. Then as the humans get contaminated they spread the virus through clothing and shoes.

Risk Factors

- Consumption of infected poultry
- Direct contact with infected bird or human
- Global panic

Risk Groups

- People in Asia or other countries that have reported cases
- The very young and the elderly, because of low immune systems
- People that come in contact with dead birds, or any excrements of birds

Treatment

Vaccine development is in the works. The effects of anti-viral drugs are still unknown. Some prototype vaccines are available for research and development.

Prevention

To prevent catching the Avian Influenza, always wash your hands, avoid touching your face, and avoid traveling where cases have been reported. You should also maintain a healthy diet and get plenty of rest. In places where cases have been reported wear a medical mask. To make sure that you get the virus out of any poultry be sure to cook the poultry product well, and avoid cross contamination. Avoid the use of raw eggs for cooking or baking.

Statistics

- In the year 2003 the Netherlands had an outbreak of the avian influenza that spread to Belgium and Germany. Just in the Netherlands more than 30 million birds were destroyed, 2.7 million in Belgium, and 400,000 in Germany.
- Total number of confirmed human cases (worldwide) from 2003-2006 is 251 cases, 148 of cases died.
- Every year the total number of cases worldwide grows, but the survival rate also grows.

Flu

Definition

The flu is an illness caused by a virus. Like a cold, it attacks the nose, throat, and lungs. The flu can sometimes lead to other problems like pneumonia, ear and sinus problems, dehydration, and worsening of asthma. For most of us, the flu will go away in one-two weeks.

Transmission

How can I catch the flu? The flu is easily passed from person to person by coughing and sneezing. A person can also get the flu by touching something with the flu virus on it and then touching their mouth or nose.

Risk Groups

Who is most at risk for getting the flu? Everyone is at risk for getting the flu, but for some people the flu can cause serious illness. Those most at risk include:

- Older adults (over age 65)
- Pregnant women
- Very young children
- Adults and children (6 months and older) who have heart or lung disease, including asthma.
- Adults and children (6 months and older) who have diabetes, kidney or blood problems.
- People with HIV/AIDS, cancer or any condition that make it harder to fight off disease
- Children and teens (6 months to 18 years) who take aspirin for a long time
- People who live in nursing homes and other health care facilities
- Workers in hospitals or clinics who are around lots of people who have the flu.

These people should contact their doctor or clinic if they have flu-like symptoms.

Signs and Symptoms

What are the signs of the flu? Fever Headache and muscle ache Tiredness Cough Sore throat Runny or stuffy nose Throwing up or diarrhea (more common in children).

Prevention

The Flu Vaccine How well does the flu shot work? The shot prevents the flu in 70% to 90% of young, healthy adults. The shot doesn't do as well at preventing flu in older adults and people with certain medical problems. But the shot does reduce the number of these people who die or need a hospital stay because of the flu. People who are allergic to eggs or who have had a reaction to the flu shot or vaccine should not be given the flu shot or nasal flu spray. Also, talk to your doctor if you have a history of Guillain-Barré syndrome.

How well does nasal spray vaccine work? This new vaccine can lower your chances of getting the flu. Children 5-8 years old need two doses at least 6 weeks apart in their first year of getting the Flu Mist, and people 9-49 need

one dose. Flu Mist should not be given to people with asthma or other lung diseases. Children under the age of 5 should not get the spray.

Are there drugs to treat the flu? Yes: Prescription medicines can lessen your symptoms or the time you are sick with the flu. Your doctor or clinic will help you decide whether these drugs are right for you.

What should I do if I get the flu? Get plenty of rest Drink lots of water or other liquids like juice and soup Don't spread your germs! Cover your mouth when you cough or sneeze, wash your hands often, and STAY HOME! Don't smoke or drink alcohol.

Treatment

Are there drugs to treat the flu? Yes: Prescription medicines can lessen your symptoms or the time you are sick with the flu. Your doctor or clinic will help you decide whether these drugs are right for you.

Statistics

Every year in the United States, on average:

- 5% to 20% of the population gets the flu.
- Children are two to three times more likely than adults to get sick with the flu.
- More than 200,000 people are hospitalized from flu complications.
- About 36,000 people die from the flu.

Hepatitis A

Definition

Hepatitis is an inflammation of the liver. In Hepatitis A the inflammation is caused by a virus.

Cause

The cause for hepatitis A is the Hepatitis A Virus (HAV) which is contracted in the following ways:

- Ingestion of fecal-contaminated food or water
- Sexual contact with someone that is infected
- Blood transfusions
- Contact with infected body fluids
- Needles that are contaminated
- Transmission between mother and child during pregnancy

Risk Groups

- People who travel internationally
- People living in areas where hepatitis A outbreaks are common
- People who live with or have sex with people that are infected
- Men who have sex with men
- Injecting and non-injecting drug users

Symptoms

Children do not have these signs and symptoms as often as adults.

- Jaundice
- Fatigue
- Abdominal Pain
- Loss of appetite
- Nausea
- Diarrhea
- Fever

Treatment

Hepatitis A Resolves on its own over a period of several weeks.

Prevention

The best way to prevent against Hepatitis A is to get the Hepatitis A vaccine. The vaccine is recommended for people from a year old and older who fall into the risk group. For a short term protection would be immune globulin. Immune globulin can be give before and up to two weeks after contact with HAV (Hepatitis A Virus). An everyday prevent against Hepatitis A would be to wash your hands with soap and water after using the bathroom, changing a diaper, and before preparing or eating food.

HIV/ AIDS

Definition

Human Immunodeficiency Virus (HIV) is a virus that attacks the immune system, making it difficult for the body to fight infection and disease.

Cause

The infection is caused by the human immunodeficiency virus (HIV).

Risk Factors

Most people get HIV by having unprotected sex or sharing needles with someone who is infected with HIV. You have an increased risk of becoming infected with HIV through sexual contact if you:

- Have unprotected sex (do not use condoms).
- Have multiple sex partners.
- Is a man who has sex with other men?
- Have high risk behaviors partner(s), partner has multiple sex partners, is a man who has sex with other men, or injects drugs.
- Have or have recently had an STD, such as Syphilis.

Symptoms

- Abdominal cramps, nausea, or vomiting
- Diarrhea
- Enlarged lymph nodes in the neck, armpits and groin area
- Fever
- Headache
- Muscle aches and joint pain
- Skin rash
- Sore throat
- Weight loss

Diagnosis

A health professional diagnoses HIV with antibody blood tests called the ELISA and the Western blot assay. A diagnosis of HIV is made after 2 or more positive ELISA testes are confirmed by a positive Western blot assay.

Treatment

Treatment for HIV depends on what stage of the infection you are in: early, established or late (AIDS). This is determined by your CD4+ cell count, the amount of virus in your blood, and whether you have had certain illnesses that are most common in people who have weakened immune systems. The most effective treatment for HIV is highly active antiretroviral therapy (HAART)- a combination of several antiretroviral drugs that aims to control the amount of virus in your body.

Prevention

You can keep from getting HIV by avoiding behaviors that might result in contact with infected blood, semen, or vaginal fluids.

- Practice safe sex to prevent HIV. Always use a condom during sexual activity.

- Do not have sex, including oral sex, with anyone who is infected with HIV. If you choose to continue to have sex with someone who has HIV, it is important to practice safe sex and to be regularly tested for HIV.
- Reduce your number of sex partners, preferably to one partner.
- Ask your sex partner or partners about their sexual history. Find out if your partner has engaged in high risk behaviors.
- Avoid alcohol and drugs, which can impair your judgment and your immune system. People who know and understand safer sex practices may not practice them when they are under the influence of alcohol or drugs.
- Do not share intravenous (IV) needles, syringes, cookers, cotton, cocaine spoons or eyedroppers with others if you use drugs.

Renal Failure

Definition

Renal failure means that your kidneys have suddenly stopped working. Normally the kidneys filter wastes and help balance water, salt, and mineral (electrolyte) levels in the blood. When your kidneys stop working, waste products, fluids, and electrolytes build up in your body. This can cause life-threatening problems. Cause: A number of serious conditions or diseases can cause the kidneys to stop working properly.

- A sudden serious drop in blood flow to the kidneys. The most common causes of low blood flow are severe blood loss, severe infection, injury and dehydration.
- Damage to the kidneys. Certain medicines, poisons, or infection can damage the kidneys. Problem medicines include antibiotics (gentamycin, streptomycin), common pain medicines (NSAID's) such as Aspirin and Ibuprofen.
- A sudden blockage that prevents urine from flowing out of the kidneys. Kidney stones, a tumor, an injury, or enlarged prostate gland can cause blockage.
- Serious heart problems such as heart failure, heart attack, abnormal heart rhythms (arrhythmia), high blood pressure, endocarditis and heart valve disease.

Symptoms

- Swelling, especially in the legs and feet
- Little or no urinary output
- Thirst and a dry mouth
- Rapid heart rate

- Feeling dizzy when you stand up
- Loss of appetite, nausea and vomiting
- Feeling confused, anxious, and restless, or sleepy
- Pain on one side of the back, just below the rib cage and above the waist

Risk Factors/ Risk Groups

- Existing kidney disease or liver disease such as nephritic syndrome and cirrhosis.
- Diabetes
- Heart Failure
- Hypertension
- Obesity
- Older Adult

Treatment

The goals of treatment for renal failure are to:

- Correct or treat the underlying cause of kidney failure
- Support the kidneys until they have healed and can work properly
- Prevent or treat any complications caused by acute renal failure

Treatment can vary widely your doctor may need to:

- Replace lost fluids, such as water, blood, plasma and restore blood flow to the kidneys.
- Discontinue any medications that may be causing the problem. These may include some antibiotics, common pain medications, and medicines used to treat cancer.
- Treat kidney disease that is causing damage to the kidney by using plasma exchange, glucocorticoids, or other medications depending on the specific disease.
- Use medicines to stop the immune system from working (immunosuppressant) when an autoimmune disorder is causing renal failure.

Supporting your kidneys so they can heal will include close management of:

- **Fluid Intake**- fluids lost because of dehydration or blood lost must be restored, but fluid intake must also be limited to avoid fluid buildup.
- **Nutrition**- A specialized diet with restricted fluid intake may be used to meet nutritional needs without putting too much stress on failing kidneys.
- **Medications**- Several medications are used to help relieve the fluid buildup that can occur in renal failure. Many doctors use diuretics to improve urine output and remove excess water from the body.

- **Dialysis**- may be used to support the kidneys until they recover. Dialysis is a machine that filters wastes and removes extra fluid from the blood. Hemodialysis is the most effective treatment for renal failure. It controls blood pressure and corrects life threatening fluid and electrolyte imbalances that occur when the kidneys are not working properly.

Prevention

Avoid diseases that increase your chance of developing renal failure such as diabetes, high blood pressure, heart failure, obesity, and long term failure kidney disease

Statistics

Kidney failure sends an estimated 400,000 Americans into treatment each year.

West Nile Virus

Definition

West Nile is an infectious organism that is capable of causing fatal neurological disease in various species including: birds, horses and humans.

Cause

Mosquitoes first get the virus when they feed on the blood of an infected bird. One to two weeks after feeding on the infected bird the virus is ready to be transmitted to another organism through the salivary glands of the mosquito. With every bite the mosquito injects saliva therefore transmitting the virus. Birds are the only animals that are able to circulate enough of the virus in the blood to infect mosquitoes. Humans and other animals do not circulate enough of the virus in the blood to infect mosquitoes.

Risk Groups

- People over 50. People that are over 50 are at higher risk to develop serious symptoms of WNV. These people should take special care to prevent getting bitten by mosquitoes.
- Anyone who is outside is at risk. The more often you are outdoors the more likely you are to get bitten by an infected mosquito.
- The risk of contracting it is very low through medical procedures.

Symptoms

Approximately 80 percent of people who are infected will not show any symptoms at all. Milder symptoms include: fever, headache, body aches, nausea, vomiting, and sometimes swollen lymph glands, or a skin rash on the chest, stomach and back. Serious symptoms include: fever, headache, neck stiffness, stupor, disorientation, coma, convulsions, muscle weakness, vision loss, numbness, and paralysis.

Treatment

There is no specific treatment for WNV. In cases when a person has milder symptoms such as fever and headache the symptoms pass on their own. In more severe cases the people usually have to go to the hospital where they can receive support treatments such as intravenous fluids, and help with breathing, and nursing care.

Prevention

The easiest way to prevent WNV is to prevent getting bitten by Mosquitoes here are some ways to prevent bites:

- Use insect repellent while outdoors that contains an EPA- registered active ingredient
- Avoid going outside between dusk and dawn. This is when mosquitoes are most active. If you are going to be outdoors between these times use long sleeves and pants.
- Make sure to have good screens on your windows to keep mosquitoes out of your house
- Get rid of any standing water from flower pots, buckets or barrels. Change water in your pet's water dish and replace the water in bird baths weekly. Keep children's wading pools empty when they are not being used. All of these things can be used for mosquito's breeding grounds.
- There have been 4180 cases of West Nile Virus in the United States
- Of the 4180 cases there have been 149 fatalities
- In Texas alone there have been 327 cases and 29 fatalities

Sources

[CDC](#)

West Nile Virus

[Chronic Diseases](#)

[Diabetes](#)

Definition

Type 1 diabetes is a disease in which the body does not produce or properly use insulin. Insulin is a hormone that is needed to convert sugar, starches and other food into energy needed for daily life. Type 2 diabetes is the most common form of diabetes. In type 2 diabetes, either the body does not produce enough insulin or the cells ignore the insulin. Insulin is necessary for the body to be able to use sugar.

Cause

The cause of diabetes continues to be a mystery, although both genetics and environmental factors such as obesity and lack of exercise appear to play roles.

Risk Factors

- Family history of diabetes
- Low activity level
- Poor diet
- Excess body weight
- Age over 45 years
- High blood pressure
- High levels of triglycerides
- Impaired glucose tolerance

Risk Groups

- Diabetes during pregnancy or baby weighing more than 9 pounds
- Certain ethnicities: African Americans, Hispanic Americans, and Native Americans

Treatment

The treatment for diabetes is simple. If you are overweight or obese it is important to lose weight. Make some changes to your diet. Eat a constant high fiber, low saturated fat, and little concentrated sweets in your diet. Try eating the same number of calories around the same time of day every day. Limit alcohol use and smoking. Exercise at least twenty minutes a day. Insulin injections are also sometime necessary to help your body metabolize the sugar you take in. When diabetes has damaged the kidneys so much where they are not able to function anymore, a patient might need a kidney transplant.

For immediate treatment of hypoglycemia (low blood sugar), take half a cup of fruit juice or 5 to 6 pieces of a hard candy. For immediate treatment of hyperglycemia (high blood sugar) exercise is helpful only if the urine doesn't

have ketones. Also cutting down the amount of food you eat will also make your blood sugar go down.

Prevention

To prevent diabetes make changes to your everyday diet. Eat lots of fruit and vegetables that are non-starchy. Eat a lot of whole grain foods. Include beans in your diet. Eat fish 2-3 times week. Only eat lean meats. Eat/drink non-fat dairy products. Drink only water and calorie free drinks. Use liquid oils to cook. Cut back on high calorie snack foods. Portion your food. Finally, you need to exercise.

Statistics

- There are 20.8 million children and adults in the United States, or 7% of the population, who have diabetes. While an estimated 14.6 million have been diagnosed with diabetes, unfortunately, 6.2 million people (or nearly one-third) are unaware that they have the disease
- 1 in every 400 – 600 children has type 1 diabetes
- 2 million overweight children between the ages of 12-19 have diabetes
- 10.5 % of all men age 20 and over have diabetes and a third of them don't know it
- 8.8% of all women over 20 have diabetes and a third don't know it
- Hispanic/Latino Americans are 1.7 times as likely to have diabetes

Diabetes Type 2

Type 2 diabetes is the most common form of diabetes. In type 2 diabetes, either the body does not produce enough insulin or the cells ignore the insulin. Insulin is necessary for the body to be able to use sugar.

Sugar is the basic fuel for the cells in the body, and insulin takes the sugar from the blood into the cells. When glucose builds up in the blood instead of going into cells, it can cause two problems:

- Right away, your cells may be starved for energy.
- Over time, high blood glucose levels may hurt your eyes, kidneys, nerves or heart.

Finding out you have diabetes is scary. But don't panic. Type 2 diabetes is serious, but people with diabetes can live long, healthy, happy lives.

While diabetes occurs in people of all ages and races, some groups have a higher risk for developing type 2 diabetes than others. Type 2 diabetes is

more common in African Americans, Latinos, Native Americans, and Asian Americans/Pacific Islanders, as well as the aged population.

Conditions & Treatment:

Arm yourself with information about conditions associated with type 2 diabetes, and how to prevent them. Conditions associated with type 2 diabetes include hyperglycemia and hypoglycemia.

You will also find helpful information about insulin, oral medications, various diagnostic tests including the A1c test, managing and checking your blood glucose, and tips on what to expect from your health care provider.

Hypertension

Definition

Hypertension is high blood pressure. Blood pressure is the force of blood pushing against the walls of arteries as it flows through them. Arteries are the blood vessels that carry oxygenated blood from the heart to the body's tissues.

Description

As blood flows through arteries it pushes against the inside of the artery walls. The more pressure the blood exerts on the artery walls, the higher the blood pressure will be. The size of small arteries also affects the blood pressure. When the muscular walls of arteries are relaxed, or dilated, the pressure of the blood flowing through them is lower than when the artery walls narrow, or constrict.

Blood pressure is highest when the heart beats to push blood out into the arteries. When the heart relaxes to fill with blood again, the pressure is at its lowest point. Blood pressure when the heart beats is called systolic pressure. Blood pressure when the heart is at rest is called diastolic pressure. When blood pressure is measured, the systolic pressure is stated first and the diastolic pressure second. If a person's systolic pressure is 120 and diastolic pressure is 80 (120/80).

Hypertension is a major health problem, especially because it has no symptoms. Many people have hypertension without knowing it. Hypertension is serious because people with the condition have a higher risk for heart disease and other medical problems than people with normal blood pressure. If left untreated, hypertension can lead to the following medical conditions:

Risk Factors

- arteriosclerosis, also called atherosclerosis
- heart attack
- stroke
- enlarged heart
- kidney damage

Risk Groups

1. People whose family members have hypertension
2. Obesity
3. People who abuse tobacco
4. People who drink alcohol excessively
5. People who have a sedentary life style
6. People who eat excessive salt
7. African-Americans
8. People who have renal disease
9. People who take immunosuppressive drugs
10. People who have a history of elevated blood pressure

Treatment

The goal of the treatment for hypertension is to lower blood pressure and to protect vital organs for getting damaged. For people with mild hypertension, the most common treatment is a change in life style. Life style changes need to include: losing weight if overweight or obese, quit smoking, eating a healthy diet (more fruit, vegetables, low fat dairy products, and less saturated and total fat), reducing amount of sodium in your diet to 2,300 milligrams a day (that is less than a tablespoon full), getting regular exercise at least 30 minutes a day several days a week, and limiting your alcohol intake (two drinks a day for men and one drink a day for women). For severe hypertension the same life style changes apply and also medications. The medications include: Angiotensin – converting enzyme, angiotensin II receptor blockers, diuretics, Beta-blockers, and calcium channel blockers.

Statistics

1. People with uncontrolled high blood pressure are: 3 times as likely to develop coronary heart disease, 6 times as likely to develop congestive heart failure, and 7 times more likely to have a stroke.
2. Nearly 1 in 3 adults in the U.S. have hypertension.
3. Of the 58 million affected almost 30% were unaware, 42% were not being untreated, and 69% did not have their hypertension under control.

Prevention

Prevention of hypertension centers on avoiding or eliminating known risk factors. Even persons at risk because of age, race, or sex or those who have an inherited risk can lower their chance of developing hypertension. The risk of developing hypertension can be reduced by making the same changes recommended for treating hypertension:

- reducing salt intake
- reducing fat intake
- losing weight
- getting regular exercise
- quitting smoking
- reducing alcohol consumption
- managing stress

Liver Cirrhosis

Definition

Cirrhosis of the liver is when scar tissue in the liver replaces the healthy tissue of the liver. This blocks the flow of blood and prevents the organ from functioning correctly.

Causes

- Excess alcohol use
- Chronic Viral Hepatitis (Hepatitis B and C)
- Chronic blockage of the bile ducts
- Drugs and other toxins
- Wilson's disease (when abnormal amounts of copper and iron accumulate in the blood)
- Cystic fibrosis
- Alpha I- antitrypsin deficiency

Risk Factors

- Moderate to heavy alcohol consumption
- Having hepatitis C, Hepatitis C, or HIV
- Family members that have the disease

Risk Groups

- African American men

Symptoms

Symptoms of Cirrhosis don't show up in the early stages of the disease. Symptoms only begin to show when the scar tissue causes liver failure. Symptoms of this are:

- Exhaustion
- Fatigue
- Loss of appetite
- Nausea
- Weakness
- Weight loss
- Abdominal pain
- Spider-like blood veins under the skin

Treatment

For hepatitis C related cirrhosis the natural proteins Regulated interferon and ribavirin are used. For the hepatitis B related cirrhosis immunomodulators are used which are a synthetic version of a peptide derived from the thymus gland. For the alcohol related cirrhosis the patient must stop drinking. The last result for these patients is a liver transplant.

Prevention

To prevent Liver Cirrhosis do the following things:

- Don't drink heavily
- Don't share needles to reduce the transmission of hepatitis
- Follow a healthy diet and exercise
- Don't smoke
- Don't use anabolic steroids
- Make sure to have regular check-ups if it runs in the family
- Don't expose yourself to drinking water that is contaminated with naturally occurring arsenic
- Birth control pills have the ability to form a benign tumor called hepatic adenomas
- have good hygiene
- keep current on hepatitis vaccinations

Statistics

- 12th leading cause of death by disease
- This disease kills 26,000 people each year

Source: [Digestive](#)

Melanoma

Definition

Melanoma is the most serious form of skin cancer. It affects the melanocytes in the skin which make melanin. Melanin gives the skin color and helps protect the body from UV radiation.

Cause

When the skin is exposed to sunlight the melanocytes produced melanin. When the skin is exposed to excessive sun light or UV Rays the melanocytes can grow abnormally and become cancerous.

Risk Factor

- The older you are the higher the risk of getting melanomas
- The more time you spend outside the more risk you have for getting melanoma
- Having dysplastic nevi (moles that are irregular in shape)
- Having many moles
- Fair skin
- Personal history of melanoma or skin cancer
- Family history of melanoma
- Severe blistering sunburns

Risk Groups

- People who have weakened immune systems (people who have certain cancers, use drugs from organ transplants, or have HIV)
- People who live where there are increased exposure to UV radiation (example Texas has more incidents of melanomas than Michigan)

Symptoms

The first symptom of a melanoma is a change in the size, shape, or color of a mole. It can also appear on the body as a new mole. In men the melanoma appears in the upper body between the shoulders and hips, or on the head or neck. In women the melanoma appears on the lower legs. These are the most common places for the melanoma to appear; however, melanomas can appear anywhere on the body.

Treatment

Surgery is always the first step in treating melanoma no matter what stage the melanoma is in. the surgery is performed to remove the entire tumor

and also some surrounding tissue. This surgery is the only treatment needed for people with small melanomas.

The only thing left for these people is to have follow ups with their doctor to make sure that they melanoma has not come back. When treating larger melanomas the patient will have to go through treatments including: immunotherapy, chemotherapy, or radiation therapy. If the melanoma has spread to other areas of the body like the lungs it cannot be cured. In these cases the treatment just focuses on relieving the symptoms and keeping the patients as comfortable as possible.

Prevention

The best way to prevent melanoma is to reduce the time you spend in the sun. Also, doing a skin self-exam every 6 to 8 weeks can help you find any signs of melanoma in its early stages. To help protect your skin from the harmful UV rays take these precautions:

- Avoid exposure to the sun during midday hours (between 10 a.m. and 4 p.m.)
- When outside wear long sleeves, long pants, and hat.
- Help protect your skin by using creams, lotions, or gels that contain sunscreen.
- Wear sunglasses. Sunglasses can help protect the eye and the skin around the eye.

Statistics

- Melanoma is one of the most common cancers in young adults
- Every year more then 50,00 people learn that they have melanoma
- Protecting against the sun the first 18 years of life can reduce the risk of melanoma by 78%.

Source: [Melanoma](#)

[Cancer](#)

Osteoporosis

Definition

Osteoporosis is accelerated bone loss. Normally, there is loss of bone mass with aging, perhaps 0.7% per year in adults. However, bone loss is greater in women past menopause than in men of the same age. The process of bone remodeling from resorption to matrix synthesis to mineralization normally takes about 8 months--a slow but constant process. Bone in older

persons just isn't as efficient as bone in younger persons at maintaining itself--there is decreased activity of bone cells and decreased production of growth factors and bone matrix.

Osteoporosis can be classified as primary or secondary. Primary osteoporosis is simply the form seen in older persons and women past menopause in which bone loss is accelerated over that predicted for age and sex.

Secondary osteoporosis results from a variety of identifiable conditions that may include:

- Metabolic bone disease, such as hyperparathyroidism
- Malnutrition
- Drug therapy, as with corticosteroids
- Prolonged immobilization
- Weightlessness with space travel

Risk Factors

Modifiable risk factors that may potentiate osteoporosis include:

1. Smoking
2. Alcohol abuse
3. Excessive caffeine consumption
4. Excessive dietary protein consumption
5. Lack of dietary calcium
6. Lack of sunlight exposure (to generate endogenous vitamin D)

Risk Groups

1. Women
2. People who have previously broken their hip or waist
3. People who have family history of Osteoporosis
4. Women that had menopause before the age of 45
5. People who have had anorexia nervosa

Treatment

Treatment will usually include three things: education, exercise, and medication. The education part of the treatment is to educate the people about the appropriate vitamin D intake and about overall nutrition. Exercise will help the patient maintain bone density and reduce the risk of falls. The medications help one or two things. Medications will reduce fractures by strengthening the bones and/or prevent future bone loss. Medications prescribed to slow or stop bone resorption are: Bisphosphonates, Calcitonin, Estrogen Receptor Modulators, and Estrogen/ hormone therapy. Medication to increase bone formation are: Teriparatide, and parathyroid hormone.

Statistics

1. Osteoporosis is second only to cardiovascular disease as leading health care problem according to the WHO (world health organizations)
2. Osteoporosis-related disabilities confine patients to more immobile days in bed than any of the following: chronic obstructive pulmonary disease, stroke, myocardial infarction, and breast cancer.
3. Life-time risk for women dying from hip fracture complications equal risk of dying from breast cancer.
4. More women die each year as a result of an osteoporosis fracture than from breast cancer and ovarian cancer combined
5. 28 million people are affected in the U.S.
6. Women are affected four times as men
7. One out of every 2 women will have osteoporosis-related fracture in their life time.

Prevention Strategies

The best long-term approach to osteoporosis is prevention. If children and young adults, particularly women, have a good diet (with enough calcium and vitamin D) and get plenty of exercise, then they will build up and maintain bone mass. This will provide a good reserve against bone loss later in life. Exercise places stress on bones that builds up bone mass, particularly skeletal loading from muscle contraction with weight training exercises. However, any exercise of any type is better than none at all, and exercise also provides benefits for prevention of cardiovascular diseases that are more common in the elderly. Athletes tend to have greater bone mass than non-athletes. Exercise in later life will help to retard the rate of bone loss.

Rheumatoid Arthritis

Definition

Rheumatoid Arthritis (RA) is a disease primarily in the joints which causes inflammation and changes in the synovial membranes. It is a chronic systemic disease. It can also affect the synovium, cartilage, blood vessels, and can cause the bone to change.

Cause

The cause of RA is unknown. Infectious agents like viruses, bacteria, and fungi, have been the suspected cause for a long time but nothing has been proven. Some believe that RA is inherited. Others even believe those certain infections or other environmental factors.

Risk Factor

- Scientists have just reported that smoking is a risk factor.
- Certain genes play a role in the immune system which can cause you to develop RA.
- Researchers believe that an environmental factor play a role. Something like a certain bacteria or a virus has to set off the disease if you already have the genes for getting the disease.
- Scientists have put the thought into some hormonal factors. Hormonal deficits or changes may trigger the arthritis.
- Higher intake of proteins and caffeine and lower intakes of vegetables and vitamin C increase the risk.

Risk Group

In general the most common group of people whom are affected are women.

Symptoms

The symptoms come and go. When the disease is in its active state the symptoms include:

- Fatigue
- Lack of appetite
- Low grade fever
- Muscle and joint aches
- Stiffness
- Joints become: swollen, red, painful, and tender

Treatment

There is no cure; you can only treat the disease. The most important part of treatment is to relieve the pain, swelling and fatigue, improve the function of the joint, to bring the joint damage to a stop, and prevent disability and disease related morbidity. NSAID's act to reduce inflammation and pain. Low doses of steroids also suppress inflammation. Prevention An easy way to prevent Rheumatoid Arthritis is to control your weight.

Strengthening your muscles is also a step in prevention. Preventing injuries will also help prevent against RA. Statistics

- Arthritis affects more than 2 million people in the United States
- Women are also more likely to be diagnosed then men
- Arthritis affect 1% of the US population

Sources Medicine Net Recovery Medicine