What is (are) Glaucoma ?
Glaucoma is a group of diseases that can damage the eye's optic nerve and result in vision loss and blindness. While glaucoma can strike anyone, the risk is much greater for people over 60. How Glaucoma Develops There are several different types of glaucoma. Most of these involve the drainage system within the eye. At the front of the eye there is a small space called the anterior chamber. A clear fluid flows through this chamber and bathes and nourishes the nearby tissues. (Watch the video to learn more about glaucoma. To enlarge the video, click the brackets in the lower right-hand corner. To reduce the video, press the Escape (Esc) button on your keyboard.) In glaucoma, for still unknown reasons, the fluid drains too slowly out of the eye. As the fluid builds up, the pressure inside the eye rises. Unless this pressure is controlled, it may cause damage to the optic nerve and other parts of the eye and result in loss of vision. Open-angle Glaucoma The most common type of glaucoma is called open-angle glaucoma. In the normal eye, the clear fluid leaves the anterior chamber at the open angle where the cornea and iris meet. When fluid reaches the angle, it flows through a spongy meshwork, like a drain, and leaves the eye. Sometimes, when the fluid reaches the angle, it passes too slowly through the meshwork drain, causing the pressure inside the eye to build. If the pressure damages the optic nerve, open-angle glaucoma -- and vision loss -- may result. There is no cure for glaucoma. Vision lost from the disease cannot be restored. However, there are treatments that may save remaining vision. That is why early diagnosis is important. See this graphic for a quick overview of glaucoma, including how many people it affects, whos at risk, what to do if you have it, and how to learn more. See a glossary of glaucoma terms.

The optic nerve is a bundle of more than 1 million nerve fibers. It connects the retina to the brain.

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What is (are) High Blood Pressure ?
Blood pressure is the force of blood pushing against the walls of the blood vessels as the heart pumps blood. If your blood pressure rises and stays high over time, its called high blood pressure. High blood pressure is dangerous because it makes the heart work too hard, and the high force of the blood flow can harm arteries and organs such as the heart, kidneys, brain, and eyes.

Normal blood pressure for adults is defined as a systolic pressure below 120 mmHg and a diastolic pressure below 80 mmHg. It is normal for blood pressures to change when you sleep, wake up, or are excited or nervous. When you are active, it is normal for your blood pressure to increase. However, once the activity stops, your blood pressure returns to your normal baseline range. Blood pressure normally rises with age and body size. Newborn babies often have very low blood pressure numbers that are considered normal for babies, while older teens have numbers similar to adults.

High blood pressure is a common disease in which blood flows through blood vessels (arteries) at higher than normal pressures. There are two main types of high blood pressure: primary and secondary high blood pressure. Primary, or essential, high blood pressure is the most common type of high blood pressure. This type of high blood pressure tends to develop over years as a person ages. Secondary high blood pressure is caused by another medical condition or use of certain medicines. This type usually resolves after the cause is treated or removed.

Abnormal blood pressure is higher than 120/80 mmHg. If either your systolic or diastolic blood pressure is higher than normal (120/80) but not high enough to be considered high blood pressure (140/90), you have pre-hypertension. Pre-hypertension is a top number between 120 and 139 or a bottom number between 80 and 89 mmHg. For example, blood pressure readings of 138/82, 128/70, or 115/86 are all in the "pre-hypertension" range. (Click the table on the right to see the stages of high blood pressure in adults.) The ranges in the table are blood pressure guides for adults who do not have any short-term serious illnesses. People with diabetes or chronic kidney disease should keep their blood pressure below 130/80 mmHg.