

## Unit 5 Lesson 1 Blood Pressure

### Measuring Blood Pressure

Blood pressure is measured using a medical instrument called a **sphygmomanometer** (pronounced: sfig-mow-mah-**nah**-meh-ter). A cuff is wrapped around a person's upper arm and pumped up to create pressure. When the cuff is inflated, it compresses (squeezes on) a large artery in the arm, stopping the blood flow for a moment. Blood pressure is measured as air is gradually let out of the cuff, which allows blood to begin to flow through the artery again when the blood pressure in the artery is greater than the pressure in the cuff.

A stethoscope is placed over an artery to hear the first pulse as the blood flows through - this is the **systolic pressure** (or the pressure at the peak of each heartbeat). The **diastolic pressure** (the pressure when the heart is resting between beats) is noted when the sounds disappear.

Blood pressure is measured in millimeters of mercury (written as mm Hg). For example, normal blood pressure in adults should be less than 120/80 mm Hg. The higher, or top, number - in this example it's 120 - is called **systolic** pressure and represents the pressure at the peak of each heartbeat. The lower, or bottom, number (80 in this example) is called **diastolic** and represents the pressure when the heart is resting between beats. The systolic pressure is read first and the diastolic pressure comes second. For example: 120/80 (120 over 80) means that the systolic pressure is 120 and the diastolic pressure is 80.

The dial on a sphygmomanometer

might look something like this:

