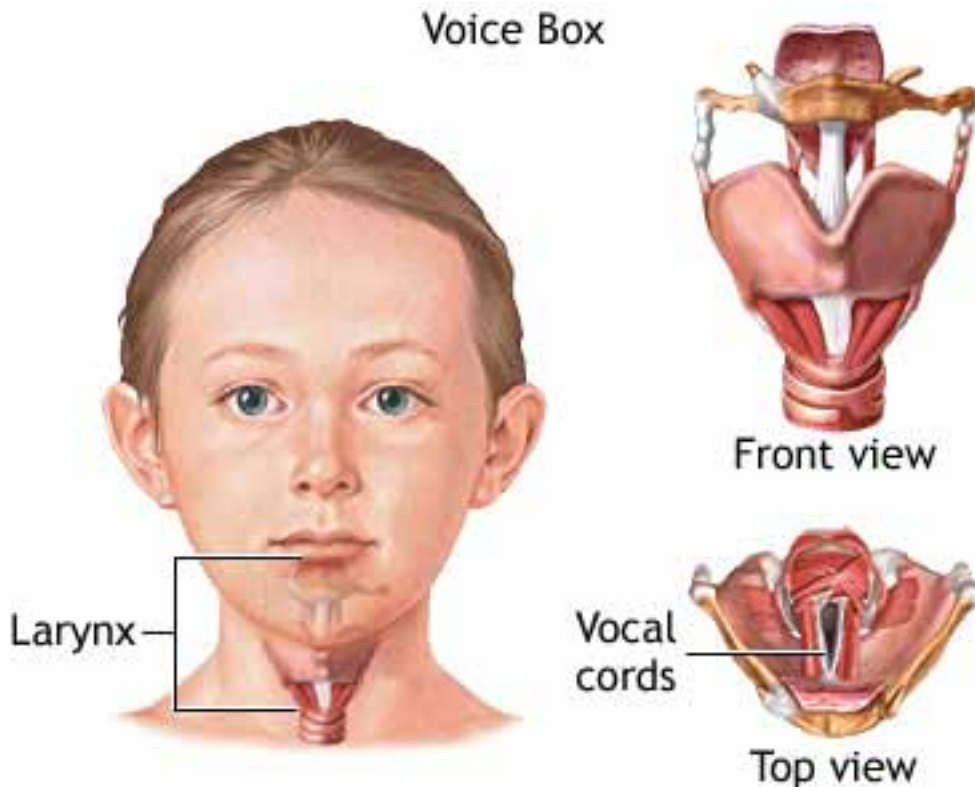


## The Larynx and Vocal Cords - how sound is produced.

The larynx, or voice box, is located in the neck and performs several important functions in the body. The larynx is involved in swallowing, breathing, and voice production. Sound is produced when the air which passes through the vocal cords causes them to vibrate and create sound waves in the pharynx, nose and mouth. The pitch of sound is determined by the amount of tension on the vocal folds.



Your voice comes from a set of muscle and membrane referred to as “The Vocal Cords”. These simple little “folds” are only about the size of your thumbnails. Some are thicker or longer than others, but still function in almost the same way in each of us. As simple as they may seem, the sound that they can create, if properly used, is almost unlimited... the key word being “properly”.

Your vocal cords or “vocal folds” are a set of membranes stretched across the windpipe and are joined at the front of the larynx and extend to the rear of the throat. When they close, the cords begin to come together or adduct and airflow is temporarily stopped. When pressure from air flow rises above the pressure of the muscles that holds the cords together, they are separated. Sound is produced when they come together again due to “phonation”. This repeats over and over as sound is produced. As a singer sings the note A above middle C, the cords vibrate at 440 times per second because that A4 pitch vibrates at a frequency of 440 khz. If the vocal cords begin to separate then the tone becomes breathy, referred to as “blasting” and the muscles around the outside of the larynx begin to constrict. This is what happens when an untrained singer tries to force high notes in their chest range and this causes an unhealthy and destructive vocal production – this is also sometimes called “yelling on pitch”. This is NOT the same as “belting” however. “Belting” is purely the application of more air pressure to create more volume. It can be done on any note within a singer’s range though it is most commonly applied to the upper chest or lower head voice.