

Testosterone and the voice: FAQs for adolescent voice change

Frequently asked questions about testosterone-related voice change

Most boys' voices now begin to change when they are twelve to thirteen years old; this change reaches its most active phase between thirteen and fourteen, and then settles when they are between fifteen and eighteen. To deal with this situation in an effective and enlightened way, it is important to understand the nature of the changing voice, and have a policy influenced by the most recent and comprehensive voice education research.

Frequently asked questions

Q What happens when your voice breaks?

A Firstly- don't talk about breaking- there's no damage occurring. Your larynx is growing bigger. In a boy, it grows by about 60%. A bigger larynx makes a lower sound.

Q How will I know when it is happening?

A The process begins at the same time as other changes. If you have had a sudden growth spurt, your larynx will be doing the same.

Q Will I be able to predict when it will start?

A Probably – the first place where you'll notice a growth spurt is your feet. If your feet are growing larger than the rest of your body, the rest of the body (including your larynx) will catch up a few months later.

Q What age will I be?

A The average age for the start of voice change is 12½. It can happen at any time from 10 to 15.

Q Can it happen overnight?

A Nothing can grow that quickly! It normally takes about two years but if it is happening gradually, you may not notice it for a while and then it could take you by surprise.

Q Can I slow it down if I carry on singing treble?

A No. It can only be slowed down by severe nutritional or emotional deprivation, hormone treatments or irreversible surgery. You can learn to use other muscles in the larynx to adapt to the growth and to continue singing high but this can lead to unhelpful habits in the longer term.

Q How will I know when to stop singing treble?

A There are lots of ways to tell: firstly, the pitch of your speaking voice will drop by a couple of semitones. You can test this by getting an app to measure the average pitch of your speaking voice. If not, you can count backwards from 20 to 1, quite fast, getting someone to listen for the approximate pitch at which your voice settles. An average unchanged voice has a speaking pitch just below middle C. A newly changing voice will be more likely to speak at Ab or G.

Q What else may I notice?

A Your speaking voice may have got a bit husky, or your singing voice may change - the top range may be weaker, or the middle may be weaker and

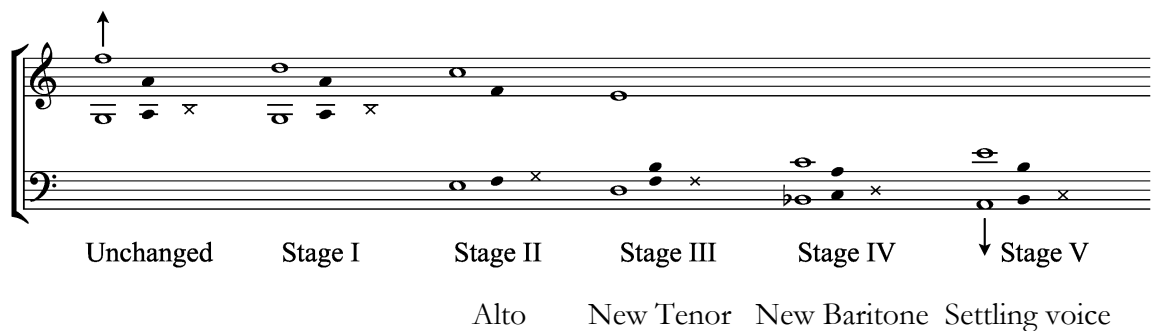
the top stronger.

Q What happens next?

A Your voice will gradually drop in pitch. Your range may decrease overall. You will move into alto, then tenor then bass. Be careful how long you spend in the tenor section, tenor parts are written for adult tenors and the range may be too great for a young voice. If in doubt, go into the lowest part that you can sing, this is the 'safe' option.

Q How should I know which part to sing as my voice changes?

A This chart was devised by John Cooksey, an American researcher who spent 30 years working on this subject.



The pitch ranges show:

- *Extended singing range* (unfilled note). This is the pitch range possible with no observable sign of strain and without using falsetto.
- *Speaking range* (filled note).
- *Speech fundamental frequency* (cross). This is usually three to four semitones above the lowest comfortable singing pitch.

Q I can still reach the notes, I'm a good leader in my choir and I enjoy singing treble. Why move now?

A Sometimes it is OK to carry on for a bit when your voice is changing.

However, if you can sing anything lower than F or E below middle C then you really are well on the way to becoming a new baritone and you can stop singing treble. It is possible that your treble voice is in fact falsetto singing (like a male alto). It is not recommended to use these muscles while your voice is in such a vulnerable state of change. Take the plunge, move part and if you really are destined to become a counter-tenor, you can try it again when your adult voice is more settled (17 or 18ish).

Q I suspect that my voice is changing but my choir conductor wants me to carry on as a treble, what should I do?

A Talk to him/her. Show him/her this article, or better still, go to the **Allocation of choral parts** article on the website, it has lots more detail on the subject. If you still aren't listened to, then you have to make a decision yourself. Ultimately your voice is yours for life. For your choir conductor, even with the best will in the world - you are a disposable commodity. Be sensible, don't over-react, talk to other people and then take responsibility for your own voice.

Q What is the worst that can happen if I do the wrong thing with my voice at this stage?

A It is unlikely that you will develop a problem needing medical help. If you do, this can normally be cured: time and rest will help. It is more likely that you will develop bad habits from having to compensate. If you spend too long singing higher than is comfortable, you may end up with unnecessary tension in your voice; a problem that may take years for a good singing teacher to sort out in the future.

Q My range is too high to sing bass but I haven't got the high notes for tenor – what should I do?

A If your speaking pitch is near to C3 (the octave below middle C) or slightly higher, then you can sing tenor. If you need to use falsetto occasionally to reach the high notes, that is an acceptable compromise. It's better than using your falsetto voice all the time.

Q When will my voice be settled, or when will I know whether I will be a tenor or a bass?

A The big changes should all be over in a couple of years, your voice will then continue to settle until your mid-twenties. You will have a good idea of your range by the time you leave school but you can stay open to the idea of further change and development.