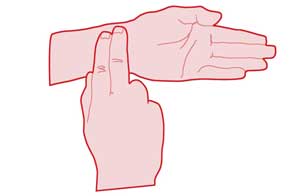
**What is a normal pulse rate?**



**Updated 7 July 2020**

**Should I worry if my pulse rate is different?**

**Senior Cardiac Nurse, Emily McGrath says:**

Your pulse rate is the number of times your heart beats per minute. A normal resting heart rate should be 60–100 beats per minute, but it can vary from minute to minute. It can go up to 130–150 beats  or higher per minute when you’re exercising – that’s normal because the body needs to pump more oxygen-rich blood around the body.

**Rapid heart rate could be due to a range of conditions**

There’s no hard and fast rule, but for adults I would worry if your heart rate was over 120 at rest. If you also have dizziness, faintness or [palpitations](https://www.bhf.org.uk/informationsupport/heart-matters-magazine/medical/ask-the-experts/palpitations), you need further tests, so make an appointment with your doctor. Rapid heart rate, known as tachycardia, could be due to a range of conditions, including infection, anaemia or disease of the thyroid gland, not necessarily [heart disease](https://www.bhf.org.uk/informationsupport/conditions/cardiovascular-heart-disease). A low heart rate, below 60 beats per minute, is called bradycardia. It can be normal in some people, for example athletes or those taking medications like [beta-blockers](https://www.bhf.org.uk/informationsupport/heart-matters-magazine/medical/drug-cabinet/beta-blockers), but could indicate heart problems or other issues so should be assessed by a doctor.

### Resting Heart Rate

To determine your resting heart rate (HRrest) is very easy. Find somewhere nice and quiet, lie down and relax. Position a watch or clock where you can see it while lying down. After 20 minutes, determine your resting pulse rate (beats/min). Use this value as your (HRrest).

If you have a heart rate monitor, put it on before you lie down. After the 20 minutes, check the recordings and identify the lowest value. Use this value as your HRrest.

The heart is a muscle, so it will become larger and become more efficient as a pump with regular exercise. As a result, you will find your resting heart rate gets lower, so you will need to check your HRrest (e.g. Monthly) regularly.

### Calculation of a zone value

The calculation of a zone value, X%, is performed in the following way:

* Subtract your HRrestfrom your HRmax giving us your reserve heart rate (HRreserve)
* Calculate the required X% on the HRreserve giving us "Z"
* Add "Z" and your HRrest together to give us the final value

Example: The athlete's HRmax is 180, and their HRrest is 60 - determine the 70% value

* HRmax - HRrest = 180 - 60 = 120
* 70% of 120 = 84
* 84 + HRrest = 84 + 60 = 144 bpm