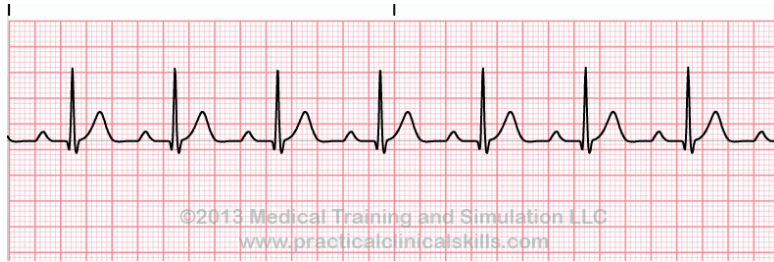**First degree heart block** is actually a delay rather than a block. It is cause by a conduction delay at the AV node or bundle of His. The PR Interval will be longer than normal (over 0.20 sec.).


First degree:
long PR interval, <u>no</u> dropped complexes, supraventricular origin

With **second degree heart block, Mobitz I**, some P waves are not followed by a QRS. Each successive impulse undergoes a longer delay. After 2 or more beats the next impulse is blocked. On an EKG tracing, PR Intervals will lengthen progressively with each beat until a QRS complex is missing. After this blocked beat, the cycle of lengthening PR Intervals resumes. This rhythm displays the **Wenckebach** phenomena.
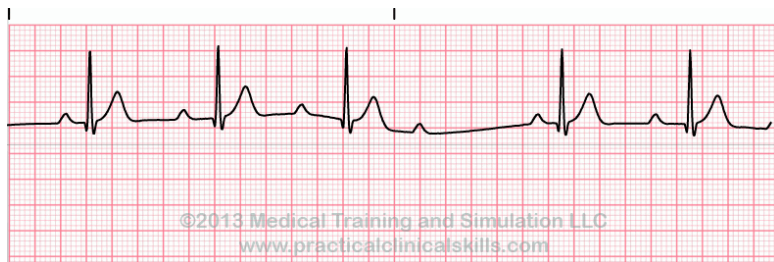

Second degree, Mobitz I:
long PR interval, dropped complexes, supraventricular origin

With **second degree heart block, Mobitz II**, the impulse is blocked in the bundle of His or primary bundle branches. Every few beats there will be a missing beat but the PR Interval will not lengthen.
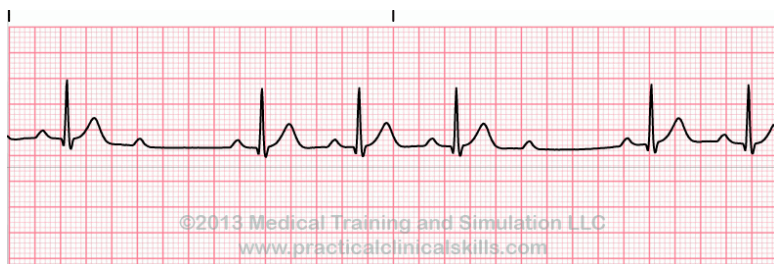
Second degree, Mobitz II:
normal PR interval, dropped complexes, infranodal origin

With the **third degree heart block**, no atrial imulses are transmitted to the ventricles. As a result, the ventricules generate an escape impulse, which is independent of the atrial beat. In most cases the atria will beat at 60-100 bpm while the ventricles asynchronously beat at 20-40 bpm.
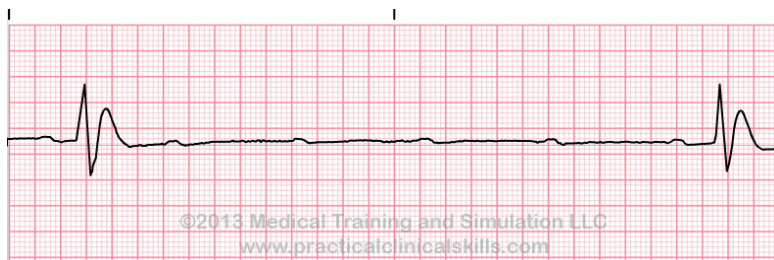
Third degree: AV dissociation, two independent paced rhythms, very slow QRS response