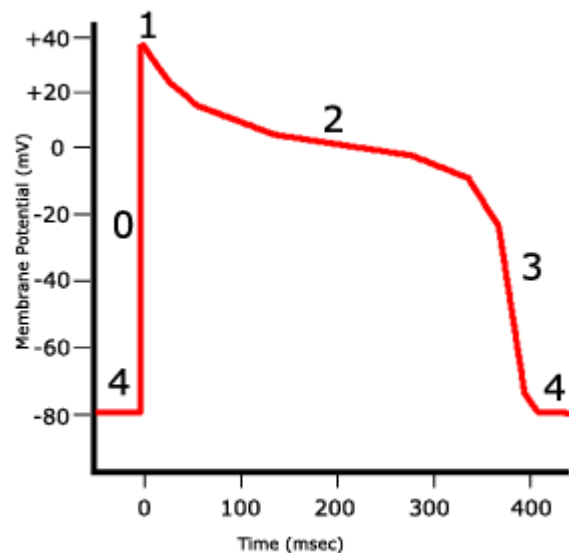


The action potential of a ventricular muscle fiber is divided into five distinct phases.

Phase 0, also known as depolarization, involves action by the fast sodium channels. The fast sodium channels open and allow the influx of sodium.

Phase 1, the initial repolarization, indicates the closure of the sodium gates. The influx of sodium is halted and the slower influx of sodium begins.

Phase 2, called the plateau phase, maintains a relatively constant current due to the action of slow calcium channels. The influx of calcium delays repolarization and prolongs the absolute refractory period.



Phase 3, the terminal repolarization phase, represents the inactivation of the slow calcium channels. This phase is also sustained by an efflux of potassium.

Phase 4, the diastolic phase relies on the sodium-potassium pump to normalize the intracellular to extracellular ion concentrations prior to the next depolarization.