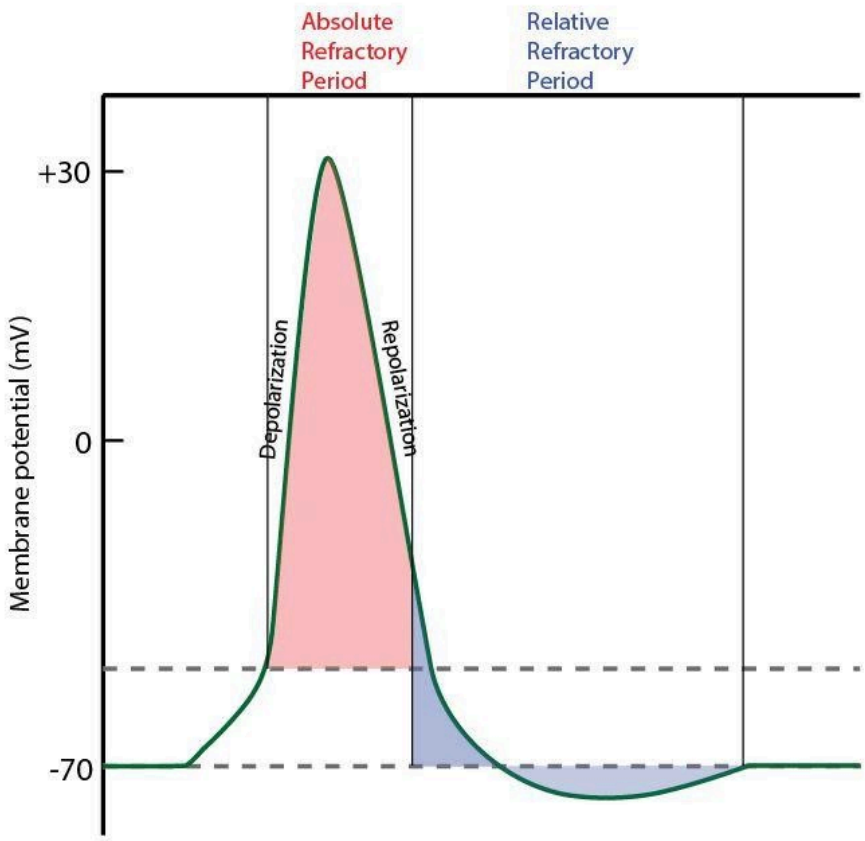
5.3.5

Refractory Periods



Refractory Period. *Image created at BYU-Idaho, Fall 2015*

Another concept to be discussed is the **refractory period**. By definition, the refractory period is the amount of time during which a cell is incapable of repeating another action potential after one has been initiated. There are two types of refractory periods: The **absolute refractory period**, which is the interval of time during which a second action potential cannot be initiated, no matter how large a stimulus is repeatedly applied. Second, the **relative refractory period**, which is the interval of time during which a second action potential can be initiated, but initiation will require a greater stimulus than before. Refractory periods are caused by the inactivation gate of the voltage-gated Na^+ channel. Once inactivated, the Na^+ channel cannot respond to another stimulus until the activation and inactivation gates are reset.

Here is a video to help with understanding:

https://books.byui.edu/-KoSc