

STAT 110

Chapter 21 Definitions

95% confidence interval – an interval calculated from sample data that is guaranteed to capture the true population parameter in 95% of all samples

$$\hat{p} \pm 1.96 \sqrt{\frac{\hat{p}(1 - \hat{p})}{n}}$$

We are 95% confident that the true proportion of adults who feel drugs is the most serious problem facing schools is between .054 and .073.

$$\hat{p} \pm z^* \sqrt{\frac{\hat{p}(1 - \hat{p})}{n}}$$