# The exact binomial test:

binom.test(x=8, n=19, p=0.35, alternative="two.sided")

###########################################################

**### Finding Clopper-Pearson confidence intervals:**

**#### Example 2 again: Exact CI:**

# The Clopper-Pearson CI for p (note 95% is the default confidence level):

binom.test(x=8, n=19, alternative="two.sided")$conf.int

# Using a 98% confidence level:

binom.test(x=8, n=19, alternative="two.sided", conf.level=0.98)$conf.int

**#### Example 1 again: Exact CI:**

**# The Clopper-Pearson 90% CI for p:**

binom.test(x=14, n=17, alternative="two.sided", conf.level=0.90)$conf.int

**# A 90% lower confidence bound:**

binom.test(x=14, n=17, alternative="greater", conf.level=0.90)$conf.int

**#### An alternative CI method: The Wilson score CI:**

**# Example 2:**

prop.test(x=8, n=19, alternative="two.sided")$conf.int

# Using a 98% confidence level:

prop.test(x=8, n=19, alternative="two.sided", conf.level=0.98)$conf.int

## Which method produces shorter intervals in this example?