PHIL 105 - Samples continued

80.44% in the survey want mandatory warning labels on food containing DNA
--80.44% of Americans want DNA warning labels on food
80.44% is very precise (it is probably inaccurate)
We need some way to make this a range, this will make it more accurate.

54% of hollywood movies suck (n = 78)
--54% of hollywood movies suck (+-11 pts) // 11 pts is the margin of error
These are percentage points not percent. The difference is adding vs multiplying.

We also have a confidence level usually 95%.

80.44% in the survey want mandatory warning labels on food containing DNA (n = 100)
--80.44% of Americans want DNA warning labels on food
+-8 points (95% CL)

A sample size of 1000 is pretty good for any population size.
+-8 points (95% CL) with n = 1000

If you choose a 99% CL then it goes up to +-3.3 points
When you increase confidence you decrease precision

sampling = work confidence = good precision = good error = bad