

**CPH 682-001: Quantitative Methods
Team Project #5**

**Fall 2017
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This project covers part of Chapter 7 and Chapter 8. Consider Scenario #2 on slide 6 of my Chapter 8 lecture. Please record your answers in an Excel file called {WB5CPH682F17 LN1 LN2 LN3 LN4.xlsx} and upload the final version into Canvas. Above, LN1 is your last name, while LN2 through LN4 are the last names of your other group members. (Groups with only three persons will have only three last names, obviously.) Members of the same group will have identical files except for the order of the last names in the filename. Members of different groups should have different files.

1. Create a contingency table like that on slide 8 of my Chapter 8 lecture.
2. Obtain point and interval estimates of the following quantities:
 - a. risk of hypertension among urban patients;
 - b. risk of hypertension among rural patients;
 - c. risk difference;
 - d. relative risk;
 - e. odds ratio.
3. Test the null hypothesis of no association between hypertension and urban/rural status by:
 - a. examining the confidence interval for the risk difference;
 - b. examining the confidence interval for the relative risk;
 - c. examining the confidence interval for the odds ratio;
 - d. comparing a chi-square statistic to a critical value;
 - e. identifying the p-value associated with a chi-square statistic.
4. The p-value in the previous item is the probability of what ?