

Problem Set 3

Q1. Import the 'mers2.csv' data set. This is a data set of MERS cases, with an indicator of whether or not they were fatal infections. Note that this is *not* the complete dataset, and it has been edited to fit the purposes of this exercise.

Examine this data set. Is binomial regression appropriate to use in this circumstance? Why or why not?

Q2. Re-estimate your final model from Problem Set 2, directly estimating the relative risk. How does your answer change?

Q3. Import the dataset 'mers3.csv'. This is a data set of MERS cases, with an indicator of whether or not they were fatal infections. Note that this is *not* the complete dataset, and it has been edited to fit the purposes of this exercise.

Consider the variable 'animal_contact'. How many values of this variable are missing? Do you think it's a good idea to continue with complete case analysis? Why or why not?

Q4. Reevaluate your final model from Problem Set 3 on this full data set. What set of confounders do you choose to include now? Consider onset, animal contact, and whether or not the case was a secondary case. Which confounders do you wish to include in the model?

Q5. Plot this model and your final model from Q2.