

VetPath 571 – Spring 2021  
Problem Set 1

1) Read and briefly reflect on *On the Origin of Risk Relativism* by C. Poole, 2010. How does this paper, and the events described in it, intersect with our discussions of causality and causal reasoning?

2) Read and briefly reflect on *Epidemiologic Methods Are Useless: They Can Only Give You Answers* by Kaufman and Hernan, 2012. Suggest a causal relationship or intervention that interests you that may be impacted by the lack of a well-formulated causal question.

3) You have been hired as a consultant to help determine whether or not exposure to violent video games causes more antisocial behavior (as defined by one or more arrests). The Oceania Ministry of Health has compiled some statistics for you.

Of a random sample of 5846 citizens, 1984 had played violent video games, while 3862 had not. Of the first group, 182 had been arrested one or more times for antisocial behavior, while in the second group, 425 had. Calculate the risk ratio, risk difference, and odds ratio corresponding to this data. Is the odds ratio appropriate to use in this case? Why or why not?

4) New data has come to light showing that in the United States the consumption of yogurt is associated with higher rates of college enrollment. Dannon is planning a massive ad campaign suggesting this link is causal. What is a possible alternative explanation? Draw a DAG to illustrate this.