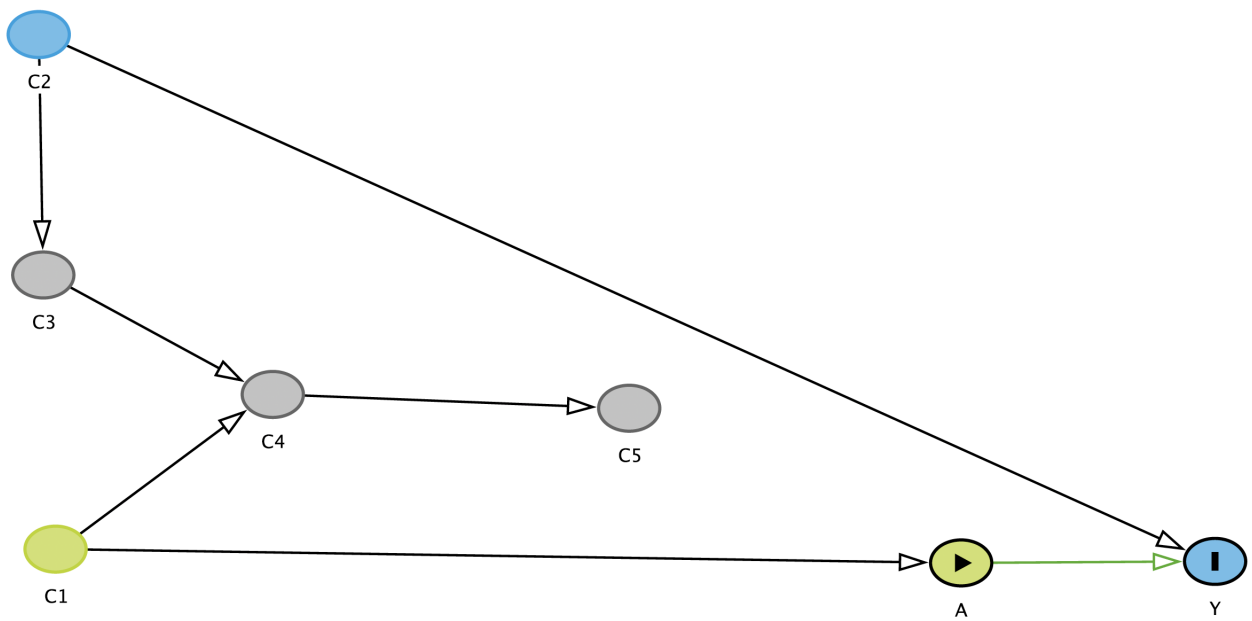# PBHLT 7115: CAUSAL METHODS FOR PUBLIC HEALTH

HOMEWORK 1

1. 1. USE DAGITTY TO REPRODUCE THE FOLLOWING DAG

1.1. **What is the minimal sufficient adjustment set(s)?**
(Hint: remember it is possible for the minimal sufficient adjustment set to be $\emptyset$)

1.2. **Show that adjusting C4 opens a backdoor path (red lines.)**

1.3. **if you adjust for C4, list all the minimal sufficient adjustment sets including C4.**
i.e., What are the minimal sufficient adjustment sets containing C4 for estimating the total effect of A on Y?

1.4. **Is the set C1, C2, C3 a sufficient adjustment set? Why?**