Developmental and etiological advances have set the stage for considering trajectories of problem behavior across the life course, but little work thus far addresses co-occurring problem behavior trajectories. Although recent work characterizes drinking and smoking trajectories, none has explored the course of concurrent drinking and smoking. Using panel data from the Monitoring the Future Project (N = 32,087), the authors applied growth mixture modeling to 4 waves of heavy drinking and smoking in a young-adult sample. The authors extracted a single latent group membership factor from heavy drinking and smoking. Associations between trajectory classes and risk factors were relatively unique to the substance being predicted. The association of smoking with alcohol expectancies and delinquency appeared to exist by virtue of smoking’s comorbidity with drinking.